



UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

Firearm Fatalities Examined at Salt River Medico-Legal Laboratory in 2009 and Their Investigative Outcome by 2014

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WCHANS001

Submitted to the University of Cape Town

In Partial Fulfilment of the Requirements for the Degree:

MPhil in Biomedical Forensic Science

Division of Forensic Medicine and Toxicology

Faculty of Health Sciences

University of Cape Town

Date of Submission: February 2016

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Abstract

South Africa has a very long history of gun violence, particularly politically motivated. The politically motivated gun violence did subside after 1994, however there was an increase in criminal gun violence. In 2004 Dr Liebenberg from the University of Cape Town conducted a study on the victimology and investigative outcomes of firearm deaths of 1999 in the Salt River Medico-Legal Laboratory drainage area. There were some compelling results, including a remarkably low conviction rate of 7.21%.

In 2000 new legislation was enacted, which is the Firearms Control Act (1) of 2000 and from 2001 to 2005 there was a 13.6% decrease in firearm homicides which was consistent after the introduction of the new act, likely due to the decrease in the number of firearms in circulation.

Because of the changes in firearm legislation and reported crime rates, it was decided to conduct a follow-up study one decade later, looking at the investigative outcomes of firearm deaths to see whether the decreased contribution of firearms in homicides and crime made an impact on the investigative and judicial process of the Salt River Medico-Legal Laboratory cases.

In 2009 there were 281 firearm deaths investigated at Salt River Medico-Legal Laboratory as opposed to 532 in 1999. In 1999, 89.29% of firearm deaths were due to homicide as opposed to 86.12% in 2009. In 1999 the majority of firearm homicide victims were Black and Coloured males between the ages of 21 and 30 years, this is similar to what is seen in 2009, however there were fewer Coloured victims in 2009. In both years homicides occurred more often on weekends, at night time. In 1999 there were peaks in May and then from October through to December. In 2009 however, the peaks were in March, May and August.

One might think that with such a large decrease in the number of firearm deaths (not considering other crime trends), the criminal justice system might have fewer cases to investigate and prosecute and that the investigative outcomes (particularly conviction rate) of these cases might improve. Even though there was a significant drop in the number of firearm deaths in 2009, there has been no improvement in the conviction rate, with 2009 having a rate of 5.69%. The number of cases still being investigated was also similar at 104 cases (37.01%) for 2009 versus 182 cases (34.54%) for 1999. In 2009 only 58 (20.64%) cases completed the judicial process by 2014, which includes the 16 cases (5.69%) that ended in a guilty verdict, 18 (6.41%) cases where a suspect was acquitted (not guilty) and also 24 (8.54%) cases that were withdrawn in court. Of the 281 cases for 2009, 10 (3.56%) were still in court, which was significantly less than the 59 (11.20%) cases in 1999. From 2009 there were 87 cases that reached an impasse (30.96%) by 2014, as opposed to the 114 (21.63%) cases from 1999 by 2004, which is a statistically significant difference.

Below are the categories of impasses with the percentages compared between 1999 and 2009:

- Cases were filed without a clear reason (11.39% for 2009; category non-existent in 1999)
- Cases filed as undetected, i.e. closed because of either of the four outcomes listed next (11.39% for 2009; category non-existent in 1999)
- The suspect had passed away (1.42% for 2009; 1.52% for 1999)
- The police never identified a suspect (6.41% in 2009; 14.42% for 1999)
- A warrant was out for the arrest of a suspect, but could not be traced (0.36% in 2009; 0.19% for 1999)
- The prosecution decided not to prosecute (0 cases in 2009; 5.50% for 1999)

Since 1999 there has been an interesting trend in the number of firearm deaths up to 2015. In 2001 there were 792 firearm deaths, after which a massive decrease started. The decrease started slowly from 2002, and between 2004 until 2011 there was a large decrease, with 2009 seeing the lowest number of firearm deaths at 281 cases. From 2010 however the number of cases started increasing again.

Even though there was a downward trend in the number of firearm deaths between 1999 and 2009, this does seem to have been transient. This is taken from that fact that in 2010 there were 317 cases, and then 294 (2011), 362 (2012), 508 (2013), 654 (2014) and ending with a shocking 713 firearm deaths in 2015. The investigative outcomes also do not look any better, putting into question the efficacy of the criminal justice system, and particularly law enforcement capability.

Acknowledgements

Firstly and foremostly I would like to thank my supervisors Dr Linda Liebenberg and Dr Marise Heyns for all their guidance, advice and patience. Dr Heyns listened to my various ideas for projects and Dr Liebenberg came to my rescue with the idea for this project. Thank you for considering my work obligations and allowing me to conduct this project part-time. I understand that working with me requires a lot of patience and I appreciate yours.

Calvin Mole played an important role in helping me with the statistics and I am very appreciative. I would also like to thank everyone in the Division of Forensic Medicine and Toxicology for playing a role in my degree, everyone who taught, assisted and supported me.

Without funding I could not have completed this degree, therefore many thanks is due to the Harry Crossley Foundation and the National Research Foundation who funded my studies. I am extremely grateful for the opportunity they provided me with.

An instrumental contributor of this project, was the South African Police Service and I would like to thank them for their co-operation and assistance in getting the data regarding the investigative outcomes. I specifically want to thank Colonel Ntsezo and Sergeant Jantjies from Woodstock Police Station.

I would also like to thank my employers, the National Health Laboratory Service, and my colleagues for allowing me to complete my dissertation and supporting me. I specifically need to thank Ms Theresa Ruppelt, the laboratory manager for all her support and understanding. Two individuals went above and beyond to help me achieve this and I want to thank Professor Jacquie Greenberg and Alina Esterhuizen from the Division of Human Genetics, I greatly appreciate everything you have done for me.

Lastly, Justin, thank you for all your love, support and assistance. It has been a long journey and without you I could not have done this, you have been my pillar of strength and encouragement.

Glossary and abbreviations

AAA – Arms and Ammunition Act

a.m. – Ante Meridiem, before midday

BAC – Blood Alcohol Concentration

Black – Black African or African

CAS – Crime Administration System

CBO – Community-Based Organisation

CIAC – Crime Information Analysis Centre

CJS – Criminal Justice System

Cln – Colonel

COD – Cause of Death

Coloured – mixed ancestry individuals

CWM – Cape Western Metropole

DFO – Designated Firearms Officer

Docket – Official collection of information on a specific case

EC – Eastern Cape

et al. – et alia

FAD – Firearm Death

FCA – Firearms Control Act

FCR – Firearms Control Regulations

FRC – Firearm Related Crime

GNP – Gross National Product

GSH – Groote Schuur Hospital

HREC – Human Research Ethics Committee

i.e. and e.g. – Exempli Gratia – that is to say or for example

Impasse – a case was closed as unresolved, due to various reasons. It never made it through court

Inquest – A formal judicial inquiry conducted by a judge or magistrate, particularly into the nature of a victim's death

IO – Investigating Officer

ISS – Institute for Security Studies

JHB – Johannesburg

KZN – Kwa-Zulu Natal

Lt – Lieutenant

MRC – Medical research Council

n/a – Not Applicable

NC – Northern Cape

n.d. – No Date

NGO – Non-Government Organisation

NIMSS – National Injury Mortality Surveillance System

Nolle prosequi – No Prosecution

NPA – National Prosecuting Authority

Other race – Any other race or ethnicity not being Black, Coloured or White, can include Asian

PE – Port Elizabeth

p.m. – Post-Meridiem, after midday

PNIMSS – Provincial National Injury Mortality Surveillance System

Prima facie – Allegations and statements are of such a nature that these are admissible in court

SACQ – South African Crime Quarterly

SALC – South African Law Commission

SAPS – South African Police Service

SRMLL – Salt River Medico-Legal Laboratory

vs. – Versus, as opposed to

WC – Western Cape

WC11 number – the serial number allocated to a deceased admitted to SRMLL, format being: WC (Western Cape)/11(indicating SRMLL)/number/year. Prior to September 2006 it was recorded as DR(death register)/number/year

White – Caucasian

WHO – World Health Organization

UCT – University of Cape Town

UK – United Kingdom

Unidirectional significant difference – It is only significantly different when using a one-sided (one-tailed) test where one assumes the null hypothesis that the test statistic (frequency, proportion or mean) of the one category is either significantly more or significantly less than the other category, as opposed to a two-sided test where the test is for significance of either.

USA – United States of America

± - Plus or minus (more or less)

% - Per cent or Percentage

g/% - Gram per percentage – measurement used for blood alcohol concentrations

Prologue

This dissertation is a follow-up of a study that was conducted as part of a Masters of Medicine in Forensic Pathology by Dr Liebenberg in 2004. Her dissertation was entitled: “Firearm Fatalities Examined at Salt River Medico-Legal Laboratory (SRMLL) in 1999 and Their Investigative Outcome by 2004”. Dr Liebenberg is also the supervisor of the current study. Both studies have two main areas of focus which seem a bit disjointed at times, but yet is related and of importance to each other. The first area of focus is the victimology of firearm death (FAD) victims, with particular focus on demographic details. The second area looks at the investigative outcomes of the FAD cases approximately five years after the death to determine its outcome and conviction rate and determine what happened to the cases that did not end in a conviction.

It was deemed valuable for epidemiological purposes to do a follow-up study one decade later, in light of all the changes surrounding South Africa’s democracy and changes in firearm legislation. It was speculated that the implementation of the Firearm Control Act (FCA) significantly improved firearm related crime statistics and just observing the decrease in firearm related deaths, specifically at SRMLL, initially supported this idea. We wanted to investigate this from a different aspect and were specifically interested in seeing the difference in the investigative and judicial outcomes after the changes in South Africa. We expected that because of fewer FADs, the implementation of stricter laws surrounding firearms as well as an increase in police manpower, there would be significant improvements in the criminal justice process of these cases.

The studies will often be referred to as the 1999 and 2009 studies, the 1999 study being the one conducted by Dr Liebenberg on FADs that occurred in 1999 and the 2009 study being the focus of the current dissertation using data from FADs that occurred in 2009. This dissertation will focus on the collection and analysis of new data as well as the comparison of data from the 1999 and the 2009 studies.

The journal that was chosen for the publication-ready manuscript is the South African Crime Quarterly (SACQ). It was chosen because this study will fit very well into the scope of this journal. The audience of the journal will be quite diverse, which would allow the article to be read widely. The SACQ does however have a policy against racial classification. This was potentially a problem for this study, seeing that a large proportion of the victimological data includes racial classification. In order to abide by the SACQ policy it was decided not to use any of the victimological information collected, apart from the manner of death. The publication-ready manuscript thus only focuses on the investigative outcomes and specifically the comparison of the results from the two studies. The comparison between the two studies is of value as the cases that formed part of the 1999 study occurred well before the introduction of the new Firearms Control

Act (FCA) of 2000 whereas the cases from the 2009 study occurred well after the introduction and implementation of the FCA.

We aimed to establish whether the new legislation affected the number of FADs and that in turn, the investigative outcomes. As the information on victimology was collected and analysed, it was decided to include an additional chapter focusing on this. This chapter presents information from the 2009 study, but also compares the data from the 1999 study with that from the 2009 study.

The biggest challenge of the project was the data collection, see Appendix C for the affidavit regarding the data collection from the South African Police Service (SAPS). Collecting the post-mortem data from the mortuary was fairly straightforward.

When finally obtaining and analysing the data, there were some very interesting results. There were far fewer FADs in 2009, as opposed to 1999, however the conviction rate remained the same. There does not seem to be an improvement in the investigative or judicial processes for FADs. The interesting decrease in the number of FADs also sparked interest in another aspect of FADs, which led to inclusion of the FAD trend analyses between 1999 and 2015. Perhaps the implementation of the new FCA contributed to the decrease in the number of FADs seen between 1999 and 2009, however this did not last, as the number of FADs seen in 2015 far exceeds that of 2009 as well as 1999.

Through the research additional aspects were covered, such as the number of SAPS investigating officers (IO's) per 100 000, to prove or disprove the assumption that inadequate staffing is responsible for poor performance. We found drastic increases in the number of IO's in 2009 as opposed to 1999, which led us to consider the impact of the FIFA World Cup Soccer Tournament that took place in 2010, in South Africa. There were many preparations for this, including in safety and security, which also meant increases in police personnel. This may have resulted in the increases in the number of IO's for the preparations for the tournament. This resulted in obtaining figures for 2015, where interestingly we found some decreases in the number of IO's, but this was not statistically significant.

The dissertation is structured into the following chapters:

- Chapter 1 is a version of the protocol or proposal submitted to the Departmental Research Committee as well as the Health Science Human Research Ethics Committee (HREC), with an explanation of areas where the final study deviated from the initial proposal
- Chapter 2 is a structured literature review which explains what was done by Dr Liebenberg in 2004, followed by literature related to her study and the current study. It contains important literature on the changes in the firearm legislation. The results obtained from this study were far more revealing

than what was anticipated from the compilation of the literature review and additional literature was added in the results and discussion sections of Chapter 3.

- Chapter 3 is the publication-ready manuscript which mainly focuses on the comparison of investigative outcomes between the 1999 and 2009 studies. We aim to publish this chapter in the SACQ in 2016.
- Chapter 4 is the victimology chapter detailing the victimology of FADs of 2009 and also comparing that to what was found in 1999. This chapter might also be written as an article and published.
- Chapter 5 is a conclusion chapter, which is a short summary of the results of chapters three and four combined.

Chapter 1 Protocol for proposal

As part of the dissertation a protocol had to be compiled, before the commencement of the study. This protocol had to be approved by the Departmental Research Committee as well as the Health Science Human Research Ethics Committee (HREC). This is a version of the proposal submitted to both entities. There were no corrections that would influence the content, the changes were mostly aesthetic. At the end of this protocol there is a detailed description of components that were changed during the commencement of the study.

Introduction

Background

In 2004 Dr Liebenberg from the Division of Forensic Medicine at the University of Cape Town (UCT) completed her Masters of Medicine in Pathology with a dissertation entitled: “Firearm Fatalities Examined at Salt River Medico-Legal Laboratory in 1999 and Their Investigative Outcome by 2004”. The objectives were to construct a profile of victims of firearm deaths (FADs) in Cape Town and also to determine the investigative status of these cases by 2004, including the conviction rate (Liebenberg, 2004).

In 1999 there were 532 reported cases of FADs in the Salt River Medico-Legal Laboratory (SRMLL) drainage area, 10.7% of these were deemed to be due to suicide. The suicide cases include victims of extended suicide, which occurs when a victim is killed in an incident where after the perpetrator then also kills him or herself. The other 89.3% were homicide cases and 5.3% of these were incidents where the police killed someone in the course of their duties (Liebenberg, 2004).

The investigative outcome of all the homicide cases was also studied. There were five different possible outcomes for each case as listed below (Liebenberg, 2004):

1. The case is still with the investigating officer (IO)
2. The case has reached an impasse
3. The case had to be excluded
4. The docket is still in the judicial process (with the prosecutor, inquest court, magistrate)
5. The judicial process is completed (not guilty, guilty, withdrawn)

Of the homicidal cases only 38 (7.2%) ended with a guilty verdict and the average time to reach this verdict since the recording of the case was 23.6 months. Twenty-two cases (4.2%) ended with a not guilty verdict with an average time lapse of 32.3 months (Liebenberg, 2004).

Literature review

In 2010 there were 547 734 registered deaths in South Africa, according to data collected by the Department of Home Affairs through the South African civil registration. In this year, there were 48 838 reported non-natural deaths (Statistics South Africa, 2014) and in 2012/2013 there were 16 259 murders. In the 2011/2012 and the 2012/2013 years, 25 625 and 20 145 firearms were confiscated respectively. In the 2011/2012 period 4 876 firearms were surrendered voluntarily and in 2012/2013 this figure was 2 936. In 2011/2012 11 980 firearms were destroyed and 56 051 in 2012/2013. Crime due to firearms decreased by 21.8% from 2004/2005 to 2012/2013 (Redpath, 2012).

The National Prosecuting Authority (NPA) has cited a conviction rate for all crimes as 88% and the definition of conviction rate by the NPA is the “percentage of cases finalised with a guilty verdict divided by the number of cases finalised with a verdict” (Rademeyer, 2014). These rates do however, not reflect the number of guilty verdicts with respect to the number of cases reported to the police (Redpath, 2012).

According to the South African law, a prosecutor is obligated to prosecute if there is a prima facie case and no compelling reason for a refusal to prosecute. A prima facie case means that the available allegations and statements are of such a nature that if these allegations or statements are proved in court and are admissible, the court should convict. In the 2005/2006 year 517 101 new dockets were received by the NPA and only 14% of cases were prosecuted, 60% of cases were declined or withdrawn and 26% were referred to the police for further investigation. The NPA’s reason for withdrawing so many cases is usually given as poor docket preparation by the police. During an audit of the NPA’s records in 2007, in 55% of the withdrawals no proper reason for withdrawal was given. There is no exhaustive list for the reasons not to prosecute, but some reasons include the extreme age of the accused (either very young or very old) or where the accused underwent tragic personal circumstances (Redpath, 2012).

In many cases crimes reported to the police never reach the prosecution stage and in some cases the police even discourage the complainant from reporting a crime. In cases where the investigation did not reveal the identity of the perpetrator the police closes the docket by reporting it as undetected. In other cases the docket can also be closed as undetected when a warrant for arrest is issued and the identity of the perpetrator is known, but not his/her whereabouts. Another reason for a docket being closed as undetected is when the complainant cannot be located. The last option is where a case is withdrawn and there is no consequence. This happens in cases where the complainant requests a withdrawal by way of an affidavit. In the aforementioned instances it is the police that decide not to prosecute, not the NPA (Redpath, 2012).

The Crime Administration System (CAS) which the police use to record the progress of crime investigation is said not to be 100% reliable and there are known to be issues around the integrity of data, although these are being improved (South African Law Commission, n.d.). The errors in data are unlikely to reflect negatively on police performance. The first reason is that random errors are unlikely to significantly affect the overall result because of the large sample size. Secondly, in the study by the South African Law Commission (n.d.) most of the cases looked at were recorded on the system as undetected, withdrawn by complainant, withdrawn in court, guilty or not guilty. These statuses required active entry of the data into the system by police officers who know and understand that the data is used to assess performance. If there is a misclassification, it is unlikely that these will be done to negatively affect police performance.

It is possible that some of the reported cases that are recorded as outstanding may in fact be finalised, but the system has not yet been updated with the current status (South African Law Commission, n.d.).

Rationale

The study conducted by Liebenberg (2004) yielded remarkably low conviction rates for FADs from the SRMLL drainage area. Only 7.2% of all FADs in 1999 had a guilty verdict by 2004. It is now 10 years after the Liebenberg (2004) study was conducted, providing an opportunity to conduct a follow-up study. There have been changes in the country since then, including the change of firearm regulations, and it would be interesting to see whether there have been any changes in the victimology as well as the investigative outcome.

Aims and objectives

Aims

The main aim of this study is to conduct a similar study and compare the results to the study completed by Dr Liebenberg in 2004.

- The first part of this aim is to conduct a victimological investigation of firearm deaths (FADs) in the drainage area of the SRMLL in 2009
- The second part of this study is to determine the investigative outcome of the 2009 FADs by 2014

Objectives

- The first objective is to identify specific groups of victims in the sample of FADs with regards to sex, race, age, blood alcohol concentrations and police precinct in which the shooting occurred
- The second objective is to determine the investigative outcome, which includes the police investigation, prosecution details, court finding, sentencing and also the time lapse from the incident until the outcome is reached

Research methodology

Through an initial search of the electronic database at the Division of Forensic Medicine and Toxicology at UCT, it was determined that there were about 270 firearm deaths in 2009. All the FADs from 2009 will be used in this study.

The first part of this study is to collect data for the victimology, which will be done using a data sheet as shown on page 9. The data will be gathered from the SRMLL Database (the “office Autopsies” database of the Division of Forensic Medicine and Toxicology, UCT) and should the information not be available on the database the hard copy archived autopsy documents at the Division will be scrutinised for details about the FADs.

The second part of the study will be to gather information from the South African Police Service (SAPS) database or CAS. The date of death as well as the police station responsible for the case will be used to get the CAS number, which can then be used to locate the information regarding the case. For this approval from the SAPS will be needed. The SAPS data sheet on page 10 will be used for this part.

The investigative outcomes as categorised by Liebenberg (2004) are as follows:

- Docket still with the investigating officer
- The case has reached an impasse
- Case had to be excluded from the study
- The dockets are in the judicial process
- The dockets have completed the judicial process and a decision has been reached (withdrawn, not guilty and guilty)

The time lapse to reach the investigative outcome will also be recorded.

The analysis of the data from both data sheets will be qualitative in nature and similar to that done by Liebenberg (2004), who graphically represented the data in the form of tables and histograms using frequencies. Table 1-1 and Figure 1-1 are from the study and serve an indication of the data analysis and representation.

Table 1-1: Race and sex of FAD victims in 1999

Manner	White		Black		Coloured		Other	
	Male	Female	Male	Female	Male	Female	Male	Female
Suicide (n=57)	18	6	9	2	19	3	0	0
Homicide (n=475)	10	2	215 (+2)*	18	200	25	3	0

* the (2) refers to two Black victims of whom the sex were not stated, but was assumed to be male . Adapted from Liebenberg (2004)

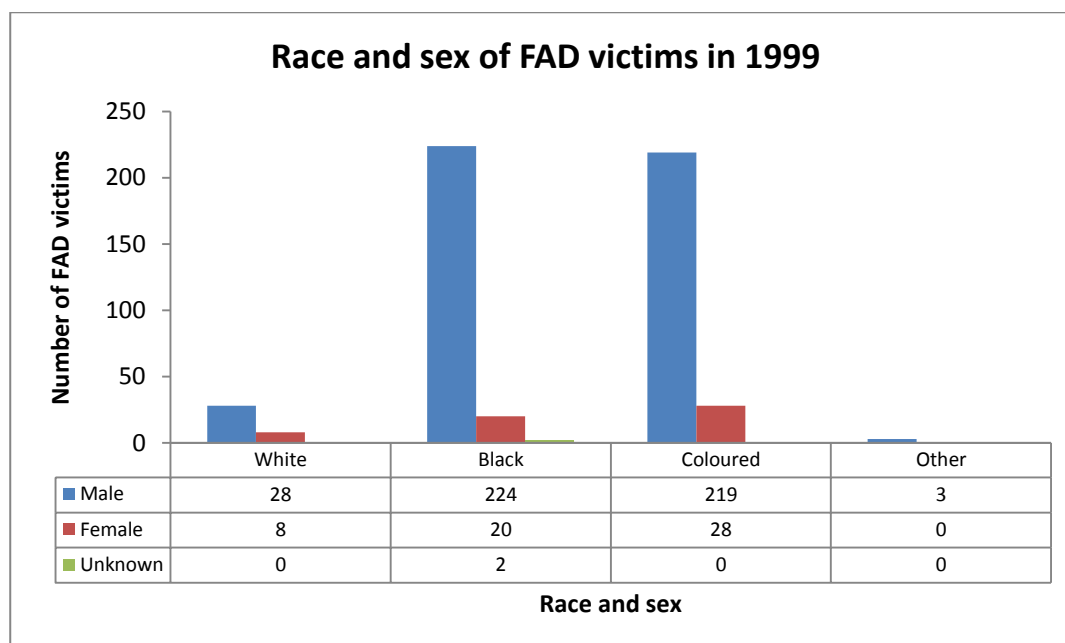


Figure 1-1: Race and sex of all FAD victims of 1999

Adapted from Liebenberg (2004)

Graphical representation such as shown above will be used for both the victimology and the investigative outcome of this study and will also mainly be in the form of frequency tables and histograms. Apart from stating the frequencies and representing it in a histogram, statistical analysis will also be applied to identify whether there are any significant differences between the variables. For example in the Liebenberg (2004) study there were many more males dying from homicidal FADs than females. There were also more Black FAD victims than White or Coloured FAD victims, but it is unclear whether these differences are statistically significant. Hypothesis testing will be used to determine whether any potential differences seen in the data are significant using statistical tests such as the Student's t-test, ANOVA and the Chi-squared test.

Most of the variables used in this study will be the same as those reported on by Liebenberg (2004), therefore comparisons between the two sets of data can be made. This will be done using the frequencies from this study and that given by Liebenberg (2004) and creating new frequency tables and histograms for the different variables followed by statistical analyses for differences between the two populations also using tests such as the Student's t-test, ANOVA and the Chi-squared test.

The possible reasons for differences will also be explored through literature, for example in 1999 (Liebenberg 2004) there were 532 FAD cases, whereas in 2009 (according to a quick database search) there were approximately 270 FADs. Reasons for the differences need to be explored and the best way will most probably be through literature searches.

Ethical considerations

It is very important to ensure the anonymity of the victims, suspects and convicted, therefore no names will be mentioned in the study and only case numbers will be used as personal identifiers. None of the documentation (including datasheets) will contain any names.

One of the conditions for approval by the SAPS is that the project will not make any conclusions that will create negative publicity for the service. SAPS provided guidelines for publication and request scrutiny of the manuscript prior to publication.

When conducting research, race is an important consideration. Since race is used as a sociodemographic measure and not a biological measure, it has relevance in this project. Since this is a follow-up study it is very important to use the same parameters. In the Liebenberg study the racial distributions in FAD cases was an important finding of the victimology and will therefore be important for this study as well. Liebenberg (2004) found the following racial distribution in homicide cases: 12 White, 235 Black, 225 Coloured and three other victims. The sex distribution was as follows in the homicide victims: 430 males (ten White, 217 Black, 200 Coloured and three other) and 45 females (two White, 18 Black and 25 Coloured). Of the suicide cases there were 46 males (18 White, nine Black and 19 Coloured) and 11 females (six White, two Black and three Coloured). The racial distribution was as follows: 24 White, 11 Black and 22 Coloured.

Budget

As this is a data-analysis project, there are no foreseeable costs. Unexpected costs are estimated to be minimal.

Timetable

	January 2015	February	March	April	May	June	July
Submit to the HREC							
Literature review							
Data collection							
Data analysis							
Write-up							
Hand-in							
Publication							

Victimology data sheet

Sample number:	
----------------	--

DR number (mortuary number)	CAS number (police number)	Police station	Investigation officer

Pathologist	Date of autopsy

Date of death (estimated)	Time of death (estimated)	Location of death (e.g. hospital, at home, etc.)

Deceased									
Sex		Race				Age			
M	F	W	BL	BR	OTHER	<18	18-25	25-40	>40

SAPS data sheet

Sample number:	
-----------------------	--

DR number (mortuary number)	CAS number (police number)	Police station	Investigation officer

Accused									
Sex		Race				Age			
M	F	W	BL	BR	OTHER	<18	18-25	25-40	>40

Firearm (s)			
Known: Yes/NO	Calibre	Registered/Not	Homemade

Type of case				
Murder	Suicide	Accident	Self-defence	Occupational (police or security)

Location of incident			
Private home	Public place	Open area	Unknown

Investigative outcome						
Still with IO	Impasse	Excluded	Judicial process	Withdrawn	Not guilty	Guilty

Time in months since incident to outcome	
--	--

Date	Time

Deviations from protocol

One of the biggest deviations from the protocol was in getting approval to obtain and use the SAPS data on investigative outcomes. As outlined in the prologue and the affidavit (Appendix C) my application to conduct research with the SAPS was rejected, leading to a lengthy process of receiving approval. See Appendix A for my application to the SAPS and Appendix B for the rejection letter. As part of the agreement for approval, we removed some areas of information collection, such as the information about the suspects or accused and only included the victims' information and docket disposal in the SAPS data sheet. Initially the information we wanted to gather is detailed in the victimology and SAPS datasheets on pages 9 and 10 respectively.

Information that was obtained from the SAPS was:

- The manner of death (MOD):
 - Homicide
 - Suicide
 - Self-defence
 - Accident
 - Occupational
 - Inquest
 - Natural
- The investigative outcomes:
 - Investigation on going
 - Undetected
 - Filed
 - Not Prosecuted
 - Suspect Dead
 - No Suspect Identified
 - Warrant out, but suspect's whereabouts unknown
 - Still in the Magistrates court
 - Still in the Inquest court
 - At the state prosecutor
 - Case withdrawn in court
 - Suspect found guilty
 - Suspect found not guilty

- The date on which the particular outcome was reached
- Any other comments, which included the number of suspects

Any details about the suspect were omitted due to time constraints. The details about the type of weapon and the investigating officer were also removed from the SAPS spread sheet questionnaire.

In the victimology questionnaire the blood alcohol concentrations were also collected and if there were other toxicological findings those were noted. Part of the additional information collected, include the information of extended suicides. If an extended suicide was suspected it was noted. When individuals passed away together, that information was also noted.

The initial planned timeline differs significantly seeing that the application process as well as the data collection took much longer than expected.

Additional information not stipulated in the protocol was also obtained. The annual number of FADs from 1999 until 2015 was obtained to investigate whether there was a trend and this information collection was covered by the letter of permission to use the mortuary database (Appendix D). Some information on the population statistics and crime or murder rates were obtained to use in the rate calculations and comparisons and these are publically available. Information was also obtained on the number of IO's at each police station for 2009 and 2015.

There was also a shift in the focus of the project. In the proposal the main aim was presenting the data for 2009, however through the analysis the comparison to 1999 data was deemed important and the study focuses heavily on comparison.

References

Liebenberg, L. 2004. Firearm fatalities examined at Salt River Medico-Legal Laboratory in 1999 and their investigative outcome by 2004. Unpublished Master's dissertation. University of Cape Town.

Rademeyer, J. 2013. *Conviction rates an unreliable benchmark of NPA success*. Available: <http://africacheck.org/reports/conviction-rates-an-unreliable-benchmark-of-npa-success/> [Last Accessed 2016, February 14].

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South African Law Commission. n.d. *Research Paper 18: Conviction rates and other outcomes of crimes reported in eight South African police areas*. Available: www.justice.gov.za/salrc/rpapers/rp18.pdf [Last Accessed 2016, February 14].

Statistics South Africa. 2014. *Statistical release P0309.3: Mortality and Causes of Death in South Africa, 2011: Findings from death notification*. Available: www.statssa.gov.za/publications/p030932014.pdf [Last Accessed 2016, February 14].

Chapter 2 Literature review

The review will begin with a very brief overview of the situation surrounding firearms in South Africa. Following this there will be an explanation of how this research question came about. A similar study was completed by Liebenberg (2004) who examined firearm deaths (FADs) in the Cape Western Metropole (CWM). This study focused on the victimology of FADs in 1999 as well as their investigative outcomes by 2004. The next section of the literature review will focus on what has been seen in South Africa in terms of crime, homicides and particularly firearm homicides, which more or less consists of other victimological studies. After this there will be an explanation in terms of the changes in legislation regarding firearms in South Africa. As part of the assessment of the success of the criminal justice system, the study focuses on the investigative outcomes of the cases, particularly conviction rate. As part of this a study conducted on conviction rates of firearm related crimes (FRCs) by the government will be outlined and the key findings highlighted. The literature on the effect of the new legislation will then be summarised, which is followed by a short section on what can be expected in terms of legislation of firearms. Finally a conclusion of the literature and justification of the current study is stated.

Background

South Africa has a long history of gun violence, particularly politically motivated. Firearms were used in the colonial era to control and rule the indigenous South Africans and it also had a prominent role in the apartheid era when many individuals came to their death due to guns (King, Proudlock & Michelson, 2006). There is a common misconception that crime only started increasing during the political transition process, however most serious crimes began to increase from the mid 1980's (Shaw, 1997; Schönteich & Louw, 2001). There was an even more dramatic increase in the early 1990's, even though violent crime was expected to decrease after 1994, these prospects have not materialised (Schönteich & Louw, 2001). Gun violence showed a similar pattern, even though politically motivated gun violence did subside after 1994. Nonetheless, due to poverty and unemployment as well as the illegal drug trade, there was an increase in criminal gun violence (King, Proudlock & Michelson, 2006; Schönteich & Louw, 2001).

Firearm fatalities in the Cape Western Metropole examined in 1999 and their investigative outcomes by 2004

In 2004 Dr Liebenberg from the Division of Forensic Medicine at the University of Cape Town (UCT) completed her Masters of Medicine in Pathology with a dissertation entitled: "Firearm Fatalities Examined at Salt River Medico-Legal Laboratory in 1999 and Their Investigative Outcome by 2004". The objectives were to construct a victimological profile of firearm deaths (FADs) in the Cape Western Metropole (CWM) (roughly half of Cape Town) and also to determine the status of the investigation of these cases by 2004, including the conviction rate. The investigative outcomes were obtained on a case-by-case basis from the South African Police Service (SAPS) (Liebenberg, 2004).

In 1999 there were 532 reported cases of FADs in the Salt River Medico-Legal Laboratory (SRMLL) drainage area, 10.7% of these were deemed to be due to suicide (which included victims of extended suicide), and the other 89.3% were homicide cases. Table 2-1 indicates the race and sex distribution of the cases in terms of homicide and suicide (Liebenberg, 2004).

Table 2-1: Distribution of FADs according to race, sex and manner of death

	White		Black		Coloured		Other	
Manner	Male	Female	Male	Female	Male	Female	Male	Female
Suicide	18	6	9	2	19	3	0	0
Homicide	10	2	215 (+2)*	18	200	25	3	0
Total	28	8	226	20	219	28	3	0

* the (+2) refers to two Black individuals for whom the sex is unknown, but assumed to be male, as this is most likely. Adapted from Liebenberg (2004)

The average age of all the victims was 31, the youngest victim was three and the oldest 69 years of age. Table 2-2 indicates the ages of homicide and suicide victims respectively.

Table 2-2: Age at death of the FAD victims according to manner of death

	Age at death							
Manner	0-10yrs	11-20yrs	21-30yrs	31-40yrs	41-50yrs	51-60yrs	61-70yrs	Unknown
Suicide	0	0	27	12	6	6	3	2
Homicide	5	65	232	113	36	12	5	8
Total	5	65	259	125	42	18	8	10

Adapted from Liebenberg (2004)

Blood alcohol concentrations (BACs) were also recorded and Table 2-3 shows the distribution of BACs according to manner of death (Liebenberg, 2004).

Table 2-3: BAC in g/% for FAD victims according to manner of death

	BAC levels (g/%)								
Manner	0	0.01-0.05	0.05-0.1	0.11-0.15	0.16-0.20	0.21-0.25	0.26-0.30	0.31-0.35	Unknown
Suicide	27	2	4	7	5	1	1	0	9
Homicide	217	30	20	34	35	33	8	1	98
Total	244	32	24	41	40	34	9	1	107

Adapted from Liebenberg (2004)

In 1999 there was a homicidal peak in May and a plateau is seen from September until December. Suicidal shootings seemed more randomly distributed, with peaks in July and August. This is indicated in Table 2-4 (Liebenberg, 2004).

Table 2-4: FADs by month of the year

	Homicides and suicides by month of year											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Suicide	7	5	7	6	1	1	7	8	4	8	5	5
Homicide	41	32	43	31	51	36	38	24	43	46	45	46
Total	48	37	50	37	52	37	45	32	47	54	50	51

Adapted from Liebenberg (2004)

As can be seen in Table 2-5, shooting homicides also showed a weekly distribution pattern where the incidents were the lowest on Tuesdays and highest on Saturday, with weekends having many more incidents than during the week. Suicidal shooting incidents clustered over weekends and Mondays, with another peak on Wednesdays and the lowest number of incidents on Thursdays (Liebenberg, 2004).

Table 2-5: FADs by day of the week

	Homicides and suicides by day of the week						
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Suicide	12	7	9	3	6	10	9
Homicide	44	41	44	51	61	122	113
Total	56	48	53	54	67	132	122

Adapted from Liebenberg (2004)

The investigative outcome of all the homicide cases was also studied. There were five main outcomes for each case, as listed below (Liebenberg, 2004).

1. The case is still with the investigating officer (IO)
2. The case has reached an impasse (no suspect was identified; a warrant is out for a suspect but the suspect has not been found; the suspect is dead or the suspect was not prosecuted. There are also two blanket-terms for some cases that reached an impasse. The first term is the case has been 'filed' in which case the reason for a case reaching an impasse is unclear and can be any of the above mentioned four outcomes. The other term is 'undetected' which is explained in the text below)
3. The case had to be excluded
4. The docket is still in the judicial process (with the State Prosecutor, Inquest court, Magistrate's court)
5. Docket completed the judicial process (not guilty, guilty, withdrawn)

The police can close a docket by reporting it as undetected and this is somewhat of a blanket term for four different outcomes, in which case the definitive reason is unknown. The first instance of a case being closed as undetected is when the investigation did not reveal the identity of the perpetrator. The docket can also be closed as undetected when a warrant is issued for a known perpetrator whose whereabouts cannot be traced. Another outcome is where the docket is closed as undetected where the complainant cannot be located. The last option is where a case is withdrawn by the complainant by way of an affidavit and there are no consequences for the suspect (Redpath, 2012). In homicide cases the last two options are not applicable.

Figure 2-1 shows the results of the investigative outcomes of the FADs from 1999, by 2004 (Liebenberg, 2004). Initially there were 532 FAD cases in 1999, however five cases were removed from the investigative outcome analysis, as these originated from outside the CWM, typically a gunshot victim who was transferred to a hospital in CWM and then died. There were 527 cases originally from the CWM police precincts and the results shown reflect the percentage of cases

relative to the total of 527 cases. There were various reasons for a case to be excluded; one of them is because there was no result on the Crime Information Analysis Centre (CIAC) of the SAPS database corresponding to the Crime Administration System (CAS) number, which happened in 32 cases. Other reasons for exclusion included: the lack of traceability of the CAS number (28 cases), duplicate dockets where the initial CAS number could not be traced (3 cases) and lastly when a case was transferred and the new CAS number could not be traced (5 cases) (Liebenberg, 2004).

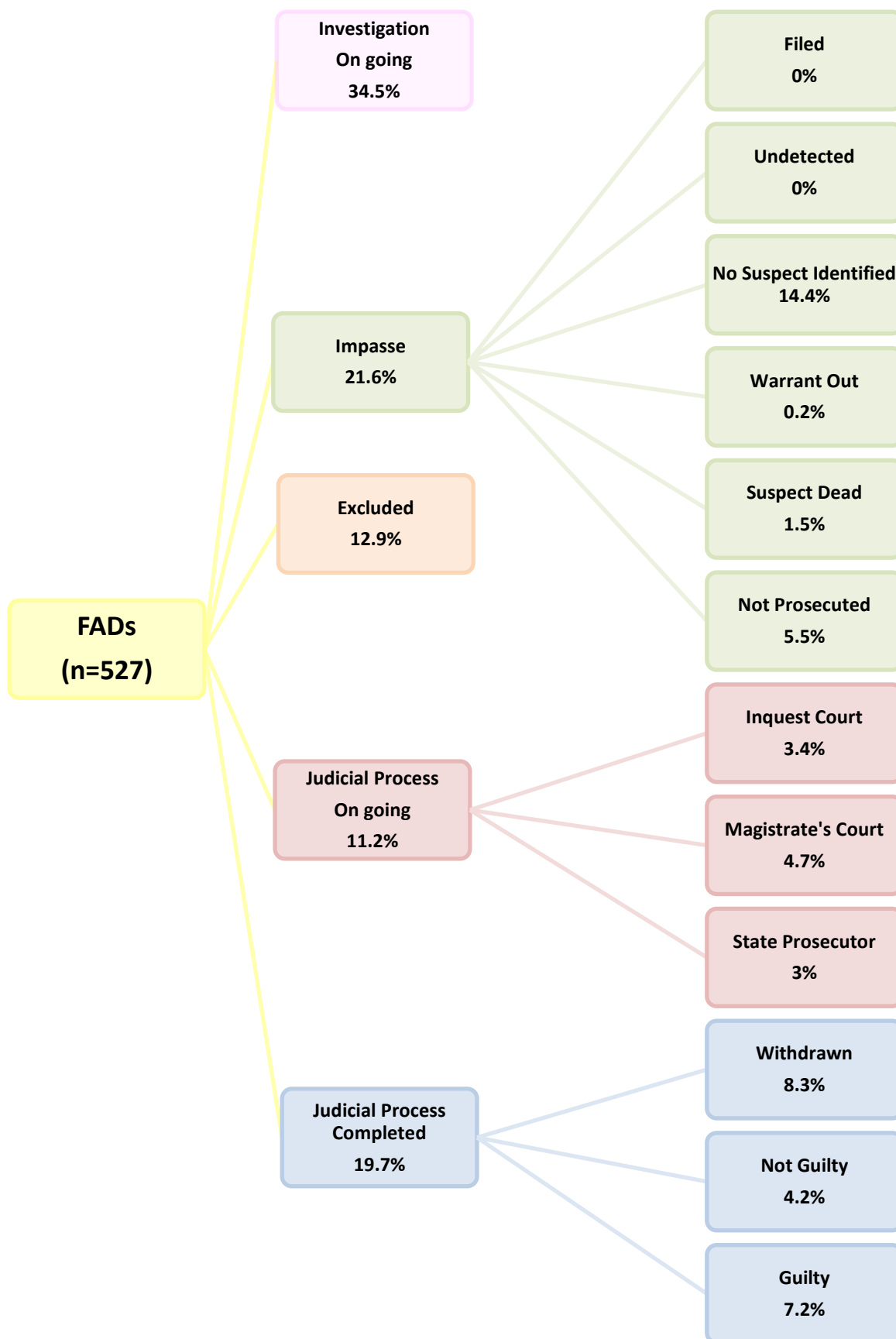


Figure 2-1: Results of investigative outcomes of 1999 cases by 2004

Results obtained from Liebenberg (2004). Percentages given are relative to the total number of cases (n=527)

The author suggested that there might be a time factor on cases being closed, seeing that cases resulting in a verdict were closed much quicker than those without a verdict or those that were left 'unsolved'. This is illustrated in Figure 2-2 (Liebenberg, 2004).

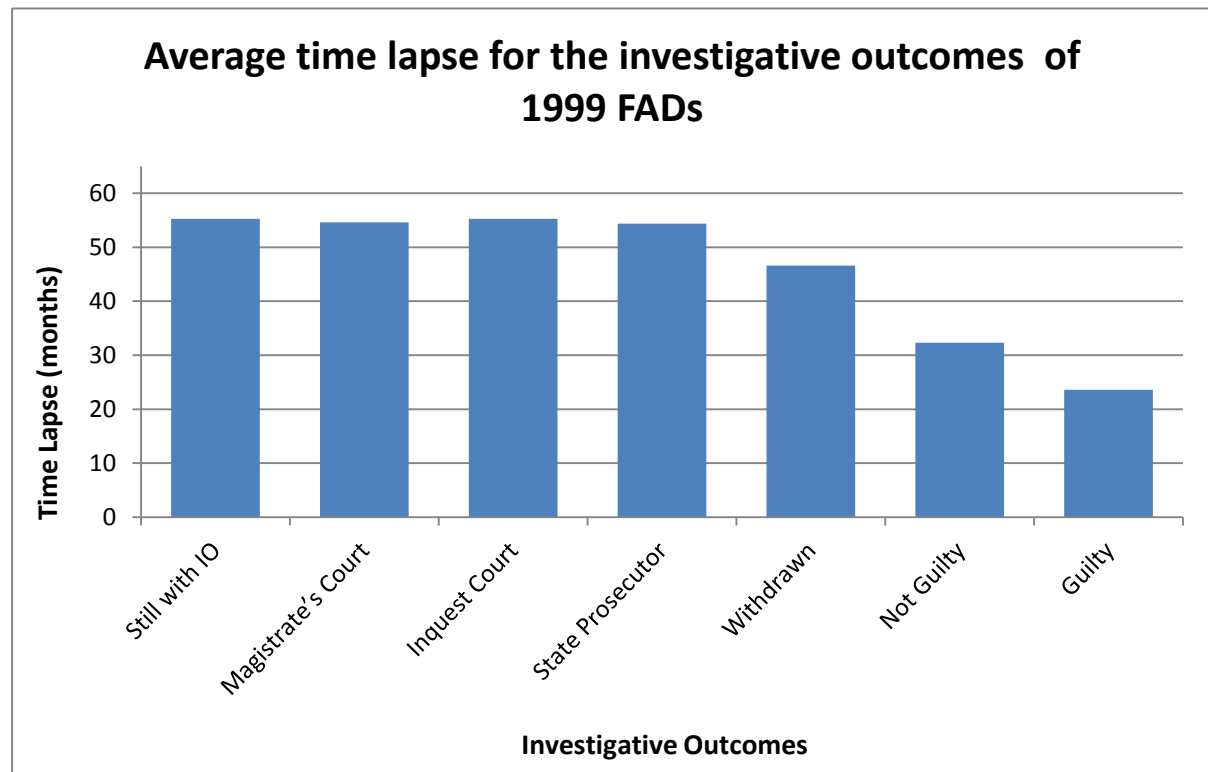


Figure 2-2: Graph illustrating the average time lapse in months
Time lapse was calculated from case registration until outcome reached (n = 527). Adapted from Liebenberg (2004)

Victimology

In 1998 the Department of Arts, Culture, Science and Technology's Innovation fund for Crime prevention approved a grant for the National Department of Health to develop the National Non-Natural Mortality Surveillance System to address the lack of epidemiological information on Non-Natural deaths. The pilot project started in June 1998 at 18 mortuaries across eight cities covering around 38 000 cases a year. Only 4% of the 246 mortuaries nationally participated. For this pilot project, the leading cause of death was homicide (45.7%). Kwa-Zulu Natal (KZN) and the Western Cape (WC) had the highest level of homicides. In KZN 50.2% of homicides were due to firearms, in the WC this was 44.3%. Among all five provinces included in the study, suicide accounted for about 7.8% of non-natural deaths and 33.2% of these were due to firearms (Butchart *et al.* 2001; Statistics South Africa, 2014).

Non-natural deaths

Subsequently, as the roll-out of the pilot project commenced in 1998, the National Non-Natural Mortality Surveillance system became the National Injury Mortality Surveillance System (NIMSS). There have been numerous publications by NIMSS, but for the purpose of this study, the 2009 study was deemed most relevant and will be the main focus of this part of the literature review. The Injury Mortality Survey of 2009 used retrospective data from the NIMSS study as well as prospective data from the WC Provincial NIMSS (PNIMSS) study for the year 2009. A stratified cluster sample was used with the eight provinces as the primary cluster (Matzopoulos *et al.* 2013).

Of the 22 583 cases from the eight provinces used in the study (NIMSS), 80.7% (18 241) were due to non-natural deaths. At this stage of the pilot study the WC was studied as a separate entity and was called the WC PNIMSS study and there were another 9418 cases, where 63.2% (5 956) were due to non-natural deaths. This results in 32 001 deaths for all nine provinces where 75.6% were due to non-natural causes. Weighting factors were used, because the cases selected were only a sample of all and the weighting is used to account for skewing by selection factors such as stratification. Amongst that shown in the formula below, the weighting calculations took into account the number of mortuaries in each metro and non-metro area.

The formula below was applied to the data (Matzopoulos *et al.* 2013):

$$RW = \text{expected sample/realised sample for each mortuary}$$
$$= 2 \text{ for mortuaries that had half their post-mortem folders surveyed}$$
$$= 1 \text{ for mortuaries that had all their post-mortem folders surveyed}$$

When the samples were weighted, there were 66 695 non-natural death cases in total, accounting for 78.7% of the sample. The report focused on the 18 241 (eight provinces excluding WC) and all 5 956 (WC) non-natural deaths, giving a total of 24 197 deaths, which reflected the total population of 52 493 when weighting was applied. Table 2-6 shows the number of non-natural deaths by province as unweighted, as well as when weighted with respect to the country's population (Matzopoulos *et al.* 2013).

Table 2-6: Non-natural deaths per province in South Africa in 2009 (unweighted and weighted).

Province	Unweighted		Weighted	
	n	%	n	%
Eastern Cape	2235	9.2	7527	14.3
Free State	2247	9.3	3155	6
Gauteng	5455	22.5	12964	24.7
KwaZulu-Natal	4546	18.8	10917	20.8
Limpopo	1173	4.9	3679	7
Mpumalanga	1019	4.2	3345	6.4
North West	1093	4.5	3421	6.5
Northern Cape	473	2	1529	2.9
Western Cape	5956	24.6	5956	11.3
Total	24197	100	52493	100

Adapted from Matzopoulos *et al.* (2013)

For the WC PNIMMS number all cases were examined, which is why the number given for the weighted values are the same as unweighted, but the percentages may change because with the weighting the population size is considered.

Table 2-7 shows a breakdown of the non-natural deaths by sex and population group. The majority of victims of non-natural death were males of African heritage.

Table 2-7: Sex and racial distribution of non-natural deaths in 2009 (unweighted and weighted).

	Male						Female						Unknown						Total					
	Unweighted			Weighted			Unweighted			Weighted			Unweighted			Weighted			Unweighted			Weighted		
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Population group																								
African	14737	76.4	34018	81.4	3379	69.9	8185	77.7	22	26.5	55	38.1	18138	75	42259	80.5								
Coloured	2479	12.9	3577	8.6	789	16.3	1077	10.2	6	7.2	6	4.1	3274	13.5	4660	8.9								
Asian	432	2.2	993	2.4	96	2	218	2.1	0	0	0	0	528	2.2	1211	2.3								
White	1556	8.1	3077	7.4	548	11.3	1035	9.8	0	0	0	0	2104	8.7	4112	7.8								
Unknown	79	0.4	141	0.3	19	0.4	26	0.3	55	66.3	84	57.8	153	0.6	252	0.5								
Total	19283	100	41807	100	4831	100	10541	100	83	100	145	100	24197	100	52493	100								

Adapted from Matzopoulos *et al.* (2013)

When looking at the ages of victims of non-natural deaths, there was an increase from 15 years of age, with a peak between 20 and 34 years, with 41% of cases falling in this category. This is shown in Table 2-8 (Matzopoulos *et al.* 2013).

Table 2-8: Age distribution of non-natural deaths by sex (weighted).

	Male		Female		Unknown		Total	
Age	n	%	n	%	n	%	n	%
<1	336	0.8	266	2.5	10	6.9	612	1.2
1-4	943	2.3	687	6.5	5	3.5	1635	3.1
5-9	778	1.9	407	3.9	8	5.6	1192	2.3
10-14	720	1.7	372	3.5	0	0	1092	2.1
15-19	3041	7.3	877	8.3	7	4.8	3924	7.5
20-24	6393	15.3	1189	11.3	3	2.1	7585	14.4
25-29	6432	15.4	1110	10.5	1	0.7	7543	14.4
30-34	5541	13.3	930	8.8	5	3.3	6476	12.3
35-39	4070	9.7	888	8.4	8	5.4	4966	9.5
40-44	3293	7.9	763	7.2	5	3.4	4061	7.7
45-49	2534	6.1	657	6.2	1	0.7	3192	6.1
50-54	2015	4.8	531	5	1	0.7	2547	4.9
55-59	1477	3.5	367	3.5	5	3.3	1849	3.5
60-64	946	2.3	331	3.1	0	0	1277	2.4
65-69	706	1.7	289	2.7	0	0	995	1.9
70-74	394	0.9	239	2.3	0	0	633	1.2
75-79	194	0.5	206	2	0	0	400	0.8
80-84	139	0.3	81	0.8	0	0	220	0.4
85+	105	0.3	85	0.8	0	0	190	0.4
Unknown	1749	4.2	269	2.6	86	59.4	2104	4
Total	41807	100	10541	100	145	100	52493	100

Adapted from Matzopoulos *et al.* (2013)

Homicide

Homicide was the leading cause of non-natural deaths in 2009 at 36.2%. Transport-related deaths are the second largest cause of injury mortalities, at 33.8% of injury-related deaths. As shown in Table 2-9, there were approximately 5.9 male homicides for every female homicide and 4.6 male suicides for every female suicide (Matzopoulos *et al.* 2013).

Table 2-9: Apparent manner of death by sex distribution in 2009 (weighted).

	Homicide		Suicide		Transport		Other unintentional		Undetermined intent		Total	
Sex	n	%	n	%	n	%	n	%	n	%	n	%
Male	16245	85.4	5307	82	13486	76	5151	72	1628	77.1	41807	79.6
Female	2740	14.4	1153	17.8	4229	23.8	1958	27.4	461	22	10541	20.1
Unknown	43	0.2	10	0.2	27	0.2	45	0.6	20	0.9	145	0.3
Total	19028	100	6417	100	17742	100	7153	100	2099	100	52493	100

Adapted from Matzopoulos *et al.* (2013)

In South Africa murder rates peaked in 1995/1996, at a rate of 67,9 per 100 000. In 2008/2009 the murder rate was 37.3 per 100 000, indicating a 45% drop between 1995/1996 and 2008/2009 (Burger, 2009). Even though this is very welcome news, it is still almost five times higher than the global rate of 7.6 per 100 000 (Burger, 2009; Burger, Gould & Newham, 2014).

Figure 2-3 shows the number of murders in South Africa as well as the WC from 2004/2005 until 2013/2014. The number of murders was highest in South Africa in 2005/2006, at 19202. The largest number of murders in the WC was in 2013/2014, at 2 909 (Brown *et al.* 2015).

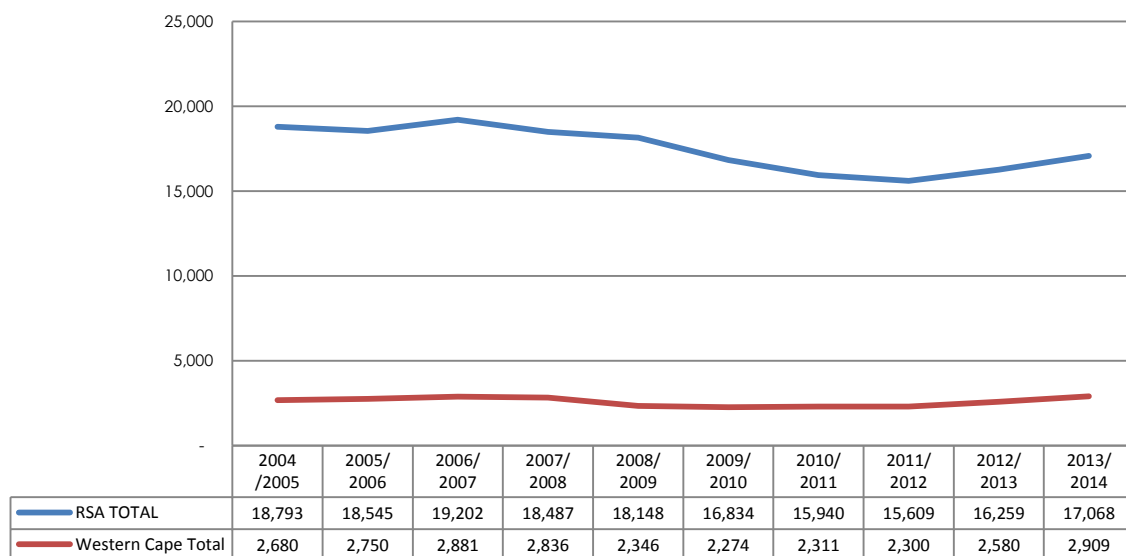


Figure 2-3: Number of murders in South Africa and the Western Cape (2004-2014)
(Brown *et al.* 2015)

In the NIMMS study using 2009 data, some patterns were seen regarding the time of the homicide. Homicides peaked in December, with another peak seen in May (Figure2-4). Homicides are also more likely to occur on the weekends (Figure 2-5) (Matzopoulos *et al.* 2013).

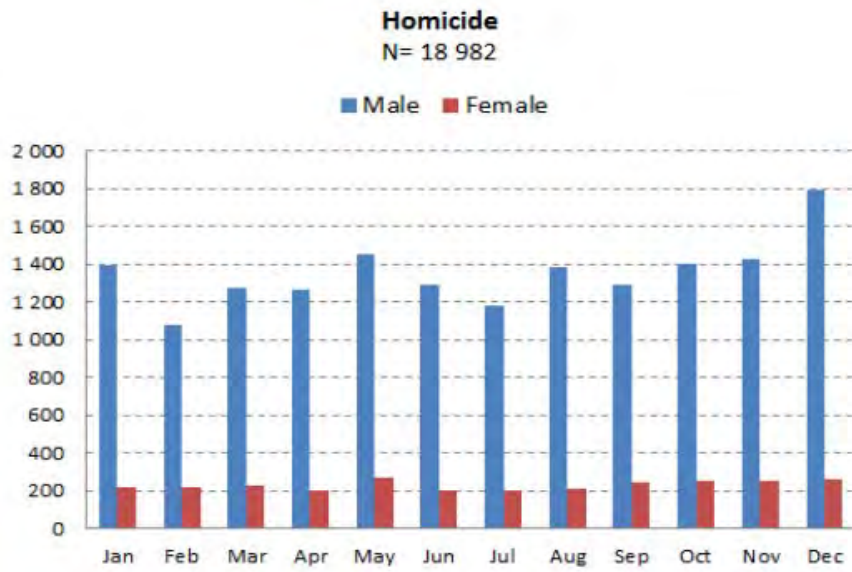


Figure 2-4: Distribution of homicide by month and sex in 2009
(Matzopoulos *et al.* 2013)

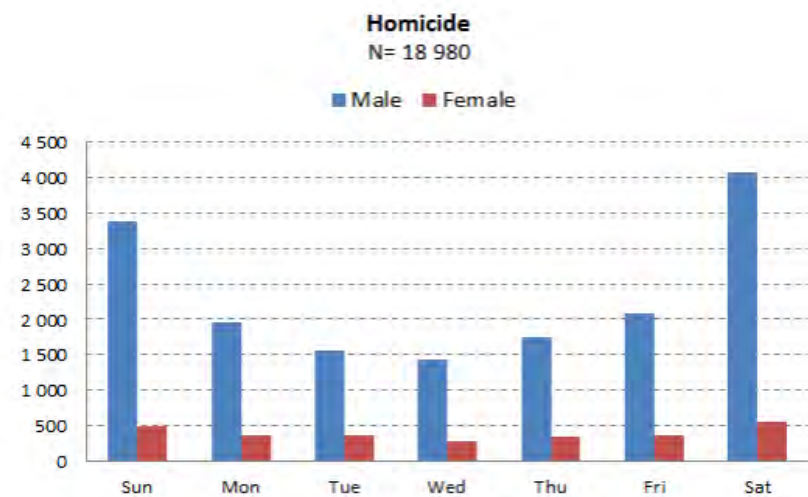


Figure 2-5: Distribution of homicide by day of the week and sex in 2009
(Matzopoulos *et al.* 2013)

Table 2-10 shows the sex distribution of homicides from 2009 by population group, once again indicating that males are the most frequent victims of homicide, particularly Black/African males (Matzopoulos *et al.* 2013).

Table 2-10: Sex distribution of homicide by population group in 2009 (weighted).

Population group	Males		Females		Unknown		Total	
	n	%	n	%	n	%	n	%
African	13883	86.3	2184	13.6	21	0.1	16088	100
Coloured	1564	81.2	363	18.8	1	0.1	1927	100
Asian	271	85.7	45	14.3	0	0	316	100
White	479	77.3	141	22.7	0	0	620	100
Unknown	47	61.7	8	10.4	21	27.9	77	100
Total	16245	85.4	2740	14.4	43	0.2	19028	100

Adapted from Matzopoulos *et al.* (2013)

Of the 19 028 homicides in 2009, 85.4% (16 245) were male, as shown in Tables 2-10 and 2-11. Most homicide victims were in the 20-29 year age group (Table 2-11) (Matzopoulos *et al.* 2013).

Table 2-11: Age distribution of homicide by sex in 2009 (weighted).

Age	Male		Female		Unknown		Total	
	n	%	n	%	n	%	n	%
<1	97	0.6	59	2.1	4	9.3	160	0.8
1-4	70	0.4	56	2	0	0	126	0.7
5-9	47	0.3	36	1.3	0	0	83	0.4
10-14	148	0.9	55	2	0	0	203	1.1
15-19	1478	9.1	201	7.3	4	9.5	1683	8.8
20-24	3096	19.1	376	13.7	3	7.2	3475	18.3
25-29	3052	18.8	320	11.7	1	2.3	3373	17.7
30-34	2361	14.5	281	10.2	4	9	2646	13.9
35-39	1542	9.5	271	9.9	4	9	1817	9.5
40-44	1168	7.2	224	8.2	1	2.3	1393	7.3
45-49	819	5	201	7.3	0	0	1020	5.4
50-54	544	3.4	167	6.1	1	2.3	712	3.7
55-59	468	2.9	95	3.5	0	0	563	3
60-64	272	1.7	93	3.4	0	0	365	1.9
65-69	174	1.1	79	2.9	0	0	253	1.3
70-74	98	0.6	66	2.4	0	0	165	0.9
75-79	50	0.3	56	2	0	0	106	0.6
80-84	46	0.3	14	0.5	0	0	60	0.3
85+	27	0.2	20	0.7	0	0	47	0.2
Unknown	687	4.2	72	2.6	21	49.1	780	4.1
Total	16245	100	2740	100	43	100	19028	100

Adapted from Matzopoulos *et al.* (2013)

Figure 2-6 shows how South Africa compares to other countries in terms of murder rates (Burger, 2009). Eleven countries were used for comparison with South Africa (Burger, 2009).

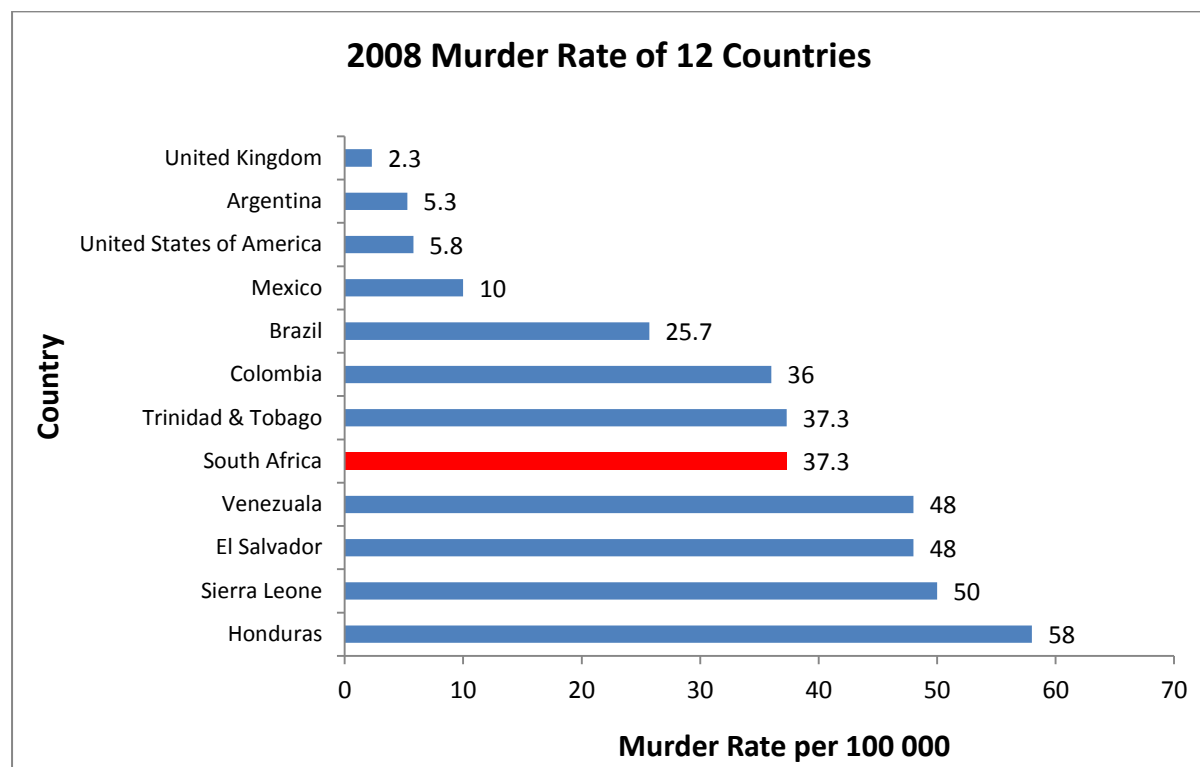


Figure 2-6: Graph comparing the South African Murder rate to that of 11 other countries.
Adapted from Burger (2009)

A study by the World Health Organization (WHO) investigating global violence trends, collected data from 133 countries, which represented 88% of the global population. In 2012 there was estimated to have been around 475 000 homicides worldwide, giving a rate of 6.7 per 100 000, with rates from high-income countries (3.8 per 100 000) generally lower than those from low- and middle-income countries. Table 2-12 shows the number and homicide rate in the different WHO regions, according to income status (World Health Organization, 2014).

The highest estimate of homicide rates was for the region of the Americas with a homicide rate of 28.5 per 100 000, followed by the African region with 10.7 per 100 000. The lowest rates are in the Western pacific region at 2.1 per 100 000. The table below depicts these rates (World Health Organization, 2014).

Table 2-12: Number of homicides and the homicide rates of seven WHO regions for 2012.

WHO region and income level	Number of homicides	Homicide rate per 100 000 population
African Region, low-and middle-income	98 081	10.9
Region of the Americas, low- and middle-income	165 617	28.5
Eastern Mediterranean Region, low- and middle-income	38 447	7.0
European Region, low- and middle income	10 277	3.8
South-East Asia Region, low- and middle-income	78 331	4.3
Western Pacific Region, low- and middle-income	34 328	2.1
All high-income Regions	48 245	3.8
Global	474 937*	6.7

Income status of the region is also shown.

Adapted from the World Health Organization (2014)

* includes 1604 homicides, estimated for WHO non-member states

* High-income countries were classified as those with a Gross National Product (GNP) per capita of more than \$8356, middle income countries between \$2696 and \$8355 GNP per capita, lower-middle income as \$676 to \$2695 per capita and low income countries as less than \$675 GNP per capita (Krug, Powell& Dahlberg, 1998).

The role of firearms in homicide

Firearms are known to contribute greatly to the murder rates in South Africa in 2009, and 30.1% of male homicide victims died due to firearms. For females this was 22.3% (Table 2-13). The most common method of homicide was sharp force, at 43.8% for males and 30% for females (Matzopoulos *et al.* 2013).

Table 2-13: Circumstances of homicide in 2009, by sex (weighted).

	Male		Female		Unknown		Total	
Circumstances	n	%	n	%	n	%	n	%
Sharp force	7112	43.8	823	30	16	36.1	7951	41.8
Firearm	4895	30.1	611	22.3	7	16.5	5513	29
Blunt force	3595	22.1	735	26.8	5	12.6	4336	22.8
Strangled	222	1.4	315	11.5	1	2.3	538	2.8
Fire	121	0.7	79	2.9	3	6.7	203	1.1
Ingestion	112	0.7	72	2.6	0	0	184	1
Abandoned	23	0.1	39	1.4	7	16.2	69	0.4
Pushed	18	0.1	9	0.3	0	0	27	0.1
Drowning	16	0.1	9	0.3	0	0	26	0.1
Gassing	21	0.1	4	0.2	0	0	25	0.1
Crushing	7	0	0	0	0	0	7	0
Electrocution	3	0	0	0	0	0	3	0
Other	54	0.3	25	0.9	4	9.6	84	0.4
Unknown	45	0.3	17	0.6	0	0	63	0.3
Total	16245	100	2740	100	43	100	19028	100

Adapted from Matzopoulos *et al.* (2013)

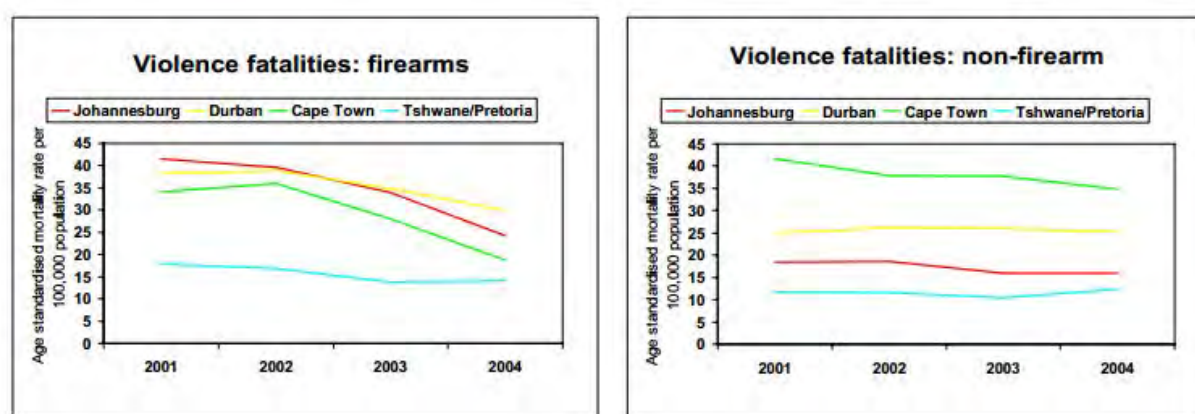


Figure 2-7: Graphs indicating firearm and non-firearm fatalities in four major South African cities

Adapted from MRC-UNISA Crime, Violence and Injury Lead Programme, n.d

As can be seen in Figure 2-7 above, there has been a decrease in firearm deaths in South Africa between 2001 and 2004, and this would point to effective measures at reducing violent crimes. It is however, unclear whether this decrease can be attributed to gun control, effective policing, and decreased rates of interpersonal violence or due to other reasons (MRC-UNISA Crime, Violence and Injury Lead Programme, n.d.). Data was collected on all FADs seen at SRMLL between 1999 and August 2015. As can be seen in Figure 2-8, the downward trend in FADs in the CWM only lasted until 2010.

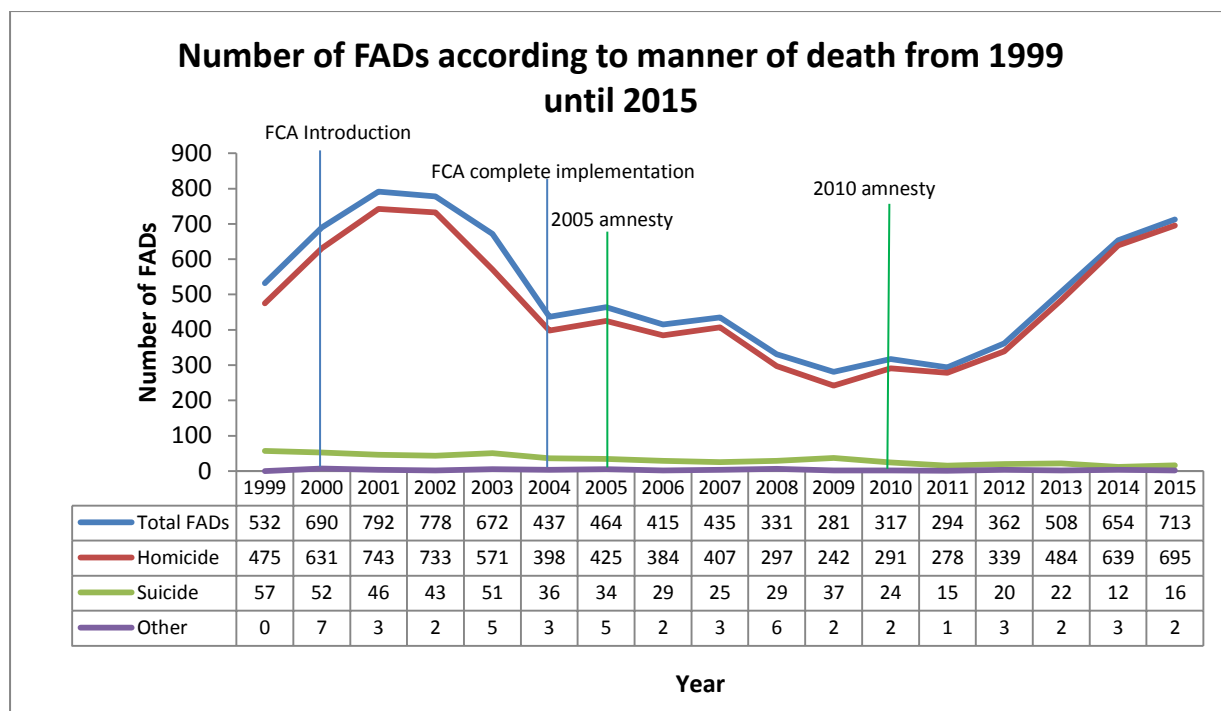


Figure 2-8: Trend in FADs in the CWM according to manner of death from 1999 until 2015.
The lines indicating areas of interest, in terms of the FCA

According to the Centre for the Study of Violence and Reconciliation (2010), there was a decline in deaths due to interpersonal violence from 45% in 2000 to 35% in 2007. There was also a decline in the percentage of violent deaths due to firearms, where in 2000 it was 53% and in 2007 it was 36%. In the Johannesburg (JHB) Metropole, there was a drastic decrease in firearm homicides from 2003 to 2004. In eThekweni there was a steady decrease from 2003 to 2007. In Cape Town there was a decrease between 2003 and 2004 and then a slight increase to 2007. In Tshwane, firearm homicide numbers are quite variable, but also the lowest of all four metropolitan areas (Centre for the Study of Violence and Reconciliation, 2010).

In South Africa, firearms accounted for 46% of all violence-associated deaths in 2004, making it the leading cause of violence-associated deaths. There was a 7:1 ratio of male to female firearm-associated victims with the 25 to 29 year age group predisposed to firearm-associated violent deaths. Of the 9 167 FADs recorded in 2004, 86% were violence-associated, 13% were suicides and less than 1% accidental or unintentional (MRC-UNISA Crime, Violence and Injury Lead Programme, n.d.). According to NIMSS data, in 2009, 29% of homicides were due to firearms (Table 2-14).

In the WC this was 21.8%. The highest percentage of homicides due to firearms was in Kwa-Zulu Natal at 42.3% (Matzopoulos *et al.* 2013).

Table 2-14: Provincial distribution of firearm and non-firearm homicide (weighted).

Province	Firearm		Non-firearm		Total	
	n	%	n	%	n	%
Eastern Cape	579	16.7	2897	83.3	3458	100
Free State	111	11.5	858	88.5	970	100
Gauteng	1760	39.7	2676	60.3	4436	100
KwaZulu-Natal	2023	42.3	2756	57.7	4779	100
Limpopo	162	18.8	699	81.2	860	100
Mpumalanga	222	33.2	446	66.8	668	100
North West	107	12.9	722	87.1	829	100
Northern Cape	21	3.4	586	96.6	607	100
Western Cape	529	21.8	1893	78.2	2422	100
Total	5513	29	13515	71	19028	100

Adapted from Matzopoulos *et al.* (2013)

Table 2-15 is data from the study mentioned earlier, performed by the World Health Organization (2014), indicating the percentages of homicides that were firearm-related as well as sharp-force related in various WHO regions. Of all homicides in all WHO regions, firearm deaths contribute to 48%, sharp force 27% and other 25%. The table below show the representation of these mechanisms according to WHO region (World Health Organization, 2014).

Table 2-15: Percentage homicides due to firearms, sharp force or other means for WHO regions, 2012

Region	Firearm	Sharp force	Other
African Region, low-and middle-income	32	35	33
Region of the Americas, low- and middle-income	75	16	9
Eastern Mediterranean Region, low- and middle-income	47	26	27
European Region, low- and middle income	25	37	38
South-East Asia Region, low- and middle-income	26	38	36
Western Pacific Region, low- and middle-income	23	39	38
All regions, high-income	47	22	31
Global	48	27	25

Adapted from the World Health Organization (2014)

An international study examined firearm deaths in 36 different countries. There was a combined homicide rate of 6.9 per 100 000 and a suicide rate of 10.9 per 100 000. The highest homicide rates were found in Estonia, Mexico, United States of America (USA) and Brazil. The lowest homicide rates were in England and Wales. The USA had the highest firearm mortality rate, with a high proportion of homicides due to firearms. Firearm mortality also occurs in lower age-groups in the USA. Higher rates of homicide, particularly firearm homicide, were indicated in the upper middle-income countries (Krug, Powell & Dahlberg, 1998).

Suicide

In a study looking at the burden of injuries in South Africa, it was found that suicide rates in South Africa in 2009 for males, were higher than the global average, but for females it was lower. Suicide in males accounted for 9.3% of injury-related deaths and females 8.6% (Norman *et al.* 2007).

The role of firearms in suicides

Stark *et al.* (2010) investigated all successful suicide cases at the Bloemfontein mortuary between 1 January 2003 and 31 December 2007. They recorded 469 cases, and these can be extrapolated to a suicide rate of 10.9 per 100 000 per year. The most common method was by hanging (55.9%), followed by shooting (21.1%) (Stark *et al.* 2010).

In South Africa there was estimated to have been 6471 suicide deaths in 2009. The most common method of suicide for both sexes was hanging, at 68.8% for males and 42.3% for females (Table 2-16). Firearms were used in 12.9% of male suicides and 8.3% of female suicides. Firearms are the second most common method of suicide for males. In females, firearms are the third most common method, ingestion being the second (Matzopoulos *et al.* 2013).

Table 2-16: Circumstances of suicide, by sex (weighted).

Circumstances	Male		Female		Unknown		Total	
	n	%	n	%	n	%	n	%
Hanging	3651	68.8	488	42.3	9	90.3	4148	64.1
Ingestion	636	12	463	40.2	0	0	1099	17
Firearm	686	12.9	93	8.1	1	9.7	780	12.1
Gassing	114	2.2	38	3.3	0	0	152	2.3
Jumped	47	0.9	37	3.2	0	0	83	1.3
Sharp force	58	1.1	4	0.4	0	0	62	1
Fire	37	0.7	15	1.3	0	0	52	0.8
Railway pedestrian	46	0.9	2	0.2	0	0	48	0.7
Other	27	0.5	9	0.8	0	0	36	0.6
Unknown	5	0.1	4	0.4	0	0	9	0.1
Total	5307	100	1153	100	10	100	6471	100

Adapted from Matzopoulos *et al.* (2013)

Other manners of death

There were a total of 48 unintentional FADs in South Africa in 2009, accounting for 0.7% of the unintentional deaths. Of these, 40 were males, accounting for 0.8% of the 5 151 males who died accidentally. There were eight females who died accidentally from firearms, accounting for 0.4%. The largest cause of accidental or unintentional deaths was due to fire (Matzopoulos *et al.* 2013).

In 2009 there were a total of 87 firearm deaths of undetermined intent, which was 4.2% of all deaths due to undetermined intent. There were 82 males (5.1% of accidental deaths) and five females (1.2% of accidental deaths) (Matzopoulos *et al.* 2013).

Firearm legislation

In 1994 the need for stricter firearm control was addressed by Gun Free South Africa, and the government initiated the examination process into the existing legislation (King, Proudlock & Michelson, 2006). Figure 2-9 is a flow diagram illustrating the stakeholders involved in the decision-making of the new firearm legislation.

The governing legislation controlling the use and distribution of firearms and ammunition is the Firearms Control Act (1) of 2000 (FCA) and the Firearms Control Regulations (FCR), which is the subsidiary legislation. This was in full effect in 2004 (Brown *et al.* 2015; Goitom, 2013) and replaced the Arms and Ammunition Act 75 of 1969 (the 1969 AAA) (Goitom, 2013). In order to own a firearm one must apply for a competency certificate, a licence and a permit or authorisation. One must also be deemed fit, proper, not inclined to violence, mentally stable and not dependant on any intoxicating or narcotic substances. There are various specific provisions involved in competency certificates, and investigations may be launched to determine whether an applicant qualifies for a competency certificate (Goitom, 2013).

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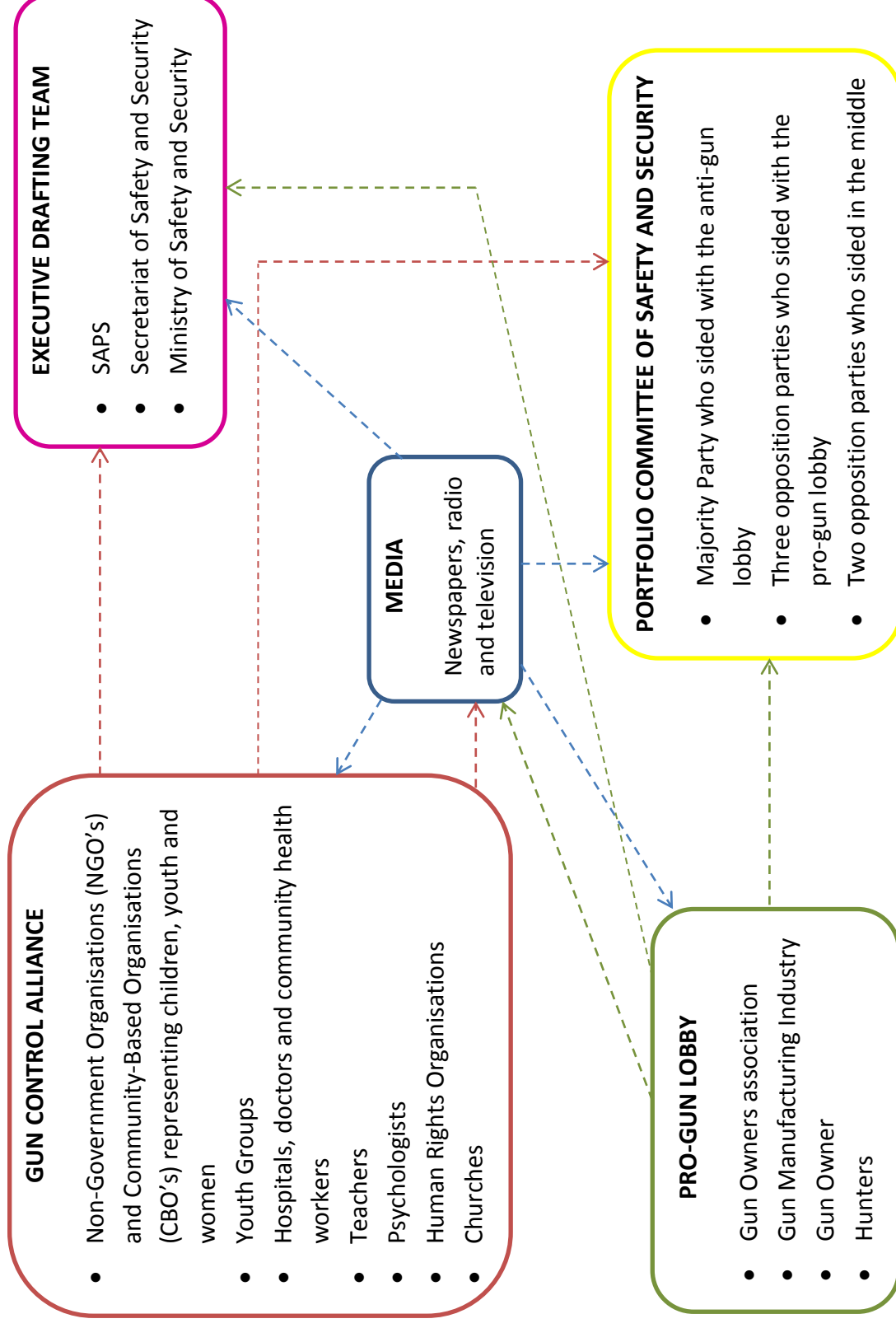


Figure 2-9: Stakeholders involved in firearm decision-making
Adapted from King, Proudlock & Michelson (2006)

Although almost all countries have measures regulating firearm access, these measures may vary widely. Table 2-17 is a list of selected International legislation regarding Firearms (World Health Organization, 2014).

Table 2-17: Firearm restrictions in a selection of countries

Country	Background check	Minimum age for purchase	Licence denied or revoked in presence of family violence	Limits on ammunition	Private sales permitted
Austria	Yes, criminal and mental health	18 years, 21 for handguns	No	Only allowed to possess ammunition for intended weapon	Yes
Brazil	Yes, criminal and mental health and employment	25 years, with exceptions	No	Any quantity	Yes
China	No civilian may lawfully acquire, possess or transfer a firearm or ammunition				
Columbia	Yes, criminal and mental health	18 years	Yes	Information not available	Information not available
Finland	Yes, criminal and mental health	18 years (15 with parental consent)	No	Any quantity	Yes
Japan	Yes, criminal and mental health	18 years	No	Any quantity	No
Mexico	Yes, criminal and mental health, physical and addiction	18 years	No	500 .22 cartridges, 1000 shotgun cartridges, 200 cartridges for other weapons	No
Nigeria	Yes, criminal and mental health and addiction	17 years	No	As much as prescribed by licence	No
South Africa	Yes, criminal, mental, medical, domestic violence, addiction, employment, previous gun licences	21 years, some exceptions	Yes	Up to 2400 primers or 200 cartridges per firearm	No
Sweden	Yes, criminal and mental health	18 years	Yes	Only allowed to possess ammunition for intended weapon	No
USA	Yes, criminal, mental, domestic violence, addiction (only when purchasing through a federal licenced dealer) Some states impose other restrictions	18 years	Yes	Restrictions based on age and certain types of ammunition	Yes

Adapted from the World Health Organization (2014)

Conviction rates

Seeing that homicide is such a big problem in South Africa, it is also important to look at the investigative and judicial process involved in solving these crimes, one part of this being the conviction rate. Conviction rate for crime is usually defined as the percentage of cases that end in a guilty verdict with respect to the number of cases finalised with a verdict. These do not consider cases that never went to court or were unreported or undetected (Rademeyer, 2013).

Redpath (2012) argues that the best measure of performance of the Criminal Justice System (CJS) is the number of guilty verdicts relative to the number of reported crimes. This measures the extent to which the CJS addresses reported crimes and includes an assortment of contributors in state appointments, such as the police, the magistrates, the department of correctional services and the legal aid board (Redpath, 2012).

The National Prosecuting Authority

The National Prosecution Authority (NPA) has cited a conviction rate of 88.8%, for all crimes in the 2009/2010 year, but this only considers cases that went to court (Rademeyer, 2013; Redpath, 2012).

In South Africa, cases are prosecuted if there is a prima facie case and if substantial evidence is provided that will give rise to a high probability of obtaining a conviction (Schönteich, 1999; Redpath, 2012). The reasons not to attempt to prosecute are not detailed in a closed list. The usual reasons include an extreme age of the accused (either very young or very old) or where the accused underwent tragic personal circumstances.

In the 2005/2006 year, 517 101 new dockets were received by the NPA and only 14% of cases were prosecuted, 60% of cases were declined and 26% were referred to the police for further investigation. The NPA tends to blame poor docket preparation by the police for the withdrawals in many cases, however, in a 2007 audit of the NPA records, 55% of the withdrawals did not have a valid reason (Redpath, 2012).

Investigative outcomes

The South African Law Commission (SALC) conducted a study to measure the progress and outcome of a sample of 15 529 crimes reported to the SAPS and compare the outcome by crime category and police area. The cases in the sample were from crimes reported between January 1997 and April 1998 and the outcome of the cases were determined in August, September and October 1999, allowing between 16 and 33 months between reporting and finalisation of the case. There were five crime categories (murder, rape of girls under the age of 18, rape of adults, robbery under aggravated circumstances and fraud) and eight police areas (CWM, Boland, Port Elizabeth (PE), Cradock, Durban, KZN Midlands, JHB and the East Rand) (South African Law Commission, n.d.).

In this sample, there were cases of murder, rape and robbery with aggravated circumstances, with 75% of the cases never going to court. In 4% of cases the trial was on-going, 10% were withdrawn from court, 5% of cases had a not-guilty verdict and only 6% of cases ended in a guilty verdict. When only considering the murder cases, 61% of cases did not go to court, 12% were still in court, 8% were withdrawn, in 8% a suspect was found not guilty and in 11% of the cases there was a guilty verdict (South African Law Commission, n.d.).

From the cases specifically in the CWM that had not gone to court, 74.1% went undetected, 16.5% were withdrawn by the complainant, 7.2% still underwent investigation and in 2.3% of the cases a warrant was issued. When specifically looking at murders in the CWM, 50.35% had not gone to court, in 19.42% of cases the trial was on going, 4.32% of cases were withdrawn in court, 8.63% were acquitted and only 17.27% were convicted. Figure 2-10 depicts the conviction rate for murder in the different areas studied and it was highest in Cradock at 36.37% and lowest in Durban at 4.69% (South African Law Commission, n.d.).

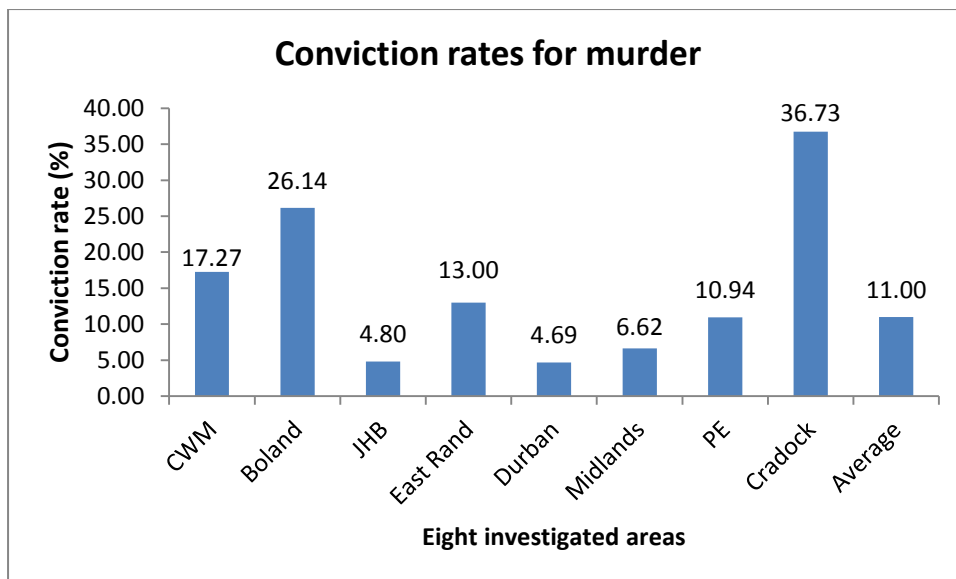


Figure 2-10: Conviction rates for murder in the eight areas in South Africa

These rates are for cases between 1 January 1997 and April 1998. Adapted from the South African Law Commission (n.d.)

For every 100 violent crimes (murder, rape and aggravated robbery) reported in South Africa, only six are convicted after two years. Moreover, most cases (three quarters) do not even make it to court after two years (South African Law Commission, n.d.).

Firearms and the media

Firearms attracted quite a bit of media attention after the release of a report by the WC Department of Community Safety (Brown *et al.* 2015). One of the first in a series of articles highlighted the fact that firearm related homicides were increasing and some of the statistics surrounding loss of firearms, and conviction rates (Malgas, 2015). One article focused on the fact that firearms are causing problems in the WC and stated that poor prosecution is due to “sloppy police investigation, a lack of evidence or because people were too scared to testify” (Etheridge, 2015a). Another article focused on the licencing of firearms and the statistics given by the Department of Community Safety (Etheridge, 2015b). An article entitled “Cape’s gun crime scourge” focused on the conviction rates and area-specific violence (Meyer, 2015). In another article, the need for another firearms amnesty period is expressed in response to a statement by Dan Plato (Minister of Community Safety) that an amnesty period will reduce the circulation of illegal firearms (Etheridge, 2015c; Western Cape Government, 2015). A recommendation for another amnesty period was made to the Police Minister Nathi Nhleko (Etheridge, 2015c; Western Cape Government, 2015). The Statement released by the Department of Community Safety was entitled “Western Cape gun problem: effective central firearms database” (Western Cape Government, 2015). According to the statement only 45 of the

150 police stations in the WC were given dedicated workstations and no additional human resources have been allocated since the implementation of the FCA in 2004. The designated firearm officers (DFO's) lack computers, scanners and data capturing systems. Since 2010 serious flaws in the Central Firearms Registry administration, as well as fraud and corruption among SAPS members, have become apparent. Among the recommendations it is stated that resources must be supplied to the Central Firearms Registry. There must be continuous training for the DFO's and their assistants. The database monitoring and the control of firearms and ammunition need to be accelerated and implemented. It is suggested that further research should be conducted, focusing on the trends of firearm related crimes (FRCs) (Western Cape Government, 2015).

Department of Community Safety study on firearms and crime

The statement by the Western Cape Government (2015), discussed earlier, was based on a study conducted by the Department of Community Safety published by Brown *et al.* (2015). A national study was conducted under the instruction from the Civilian Secretariat of Police. Each province was required to conduct research on the FCA implementation and to review case dockets of FRCs that occurred between 1999 and 2014 (Brown *et al.* 2015). This report touches on the main concepts reviewed in this literature review.

Brown *et al.* (2015) intended the following for this study:

- Examine existing data on FRC in South Africa and the WC
- Examine the implementation of the FCA
- Identify problems that the SAPS encounter whilst enforcing the FCA in the WC

As part of fulfilling the aims, they examined 300 case dockets from 1999 to 2014. Four police stations were used; two urban (Mitchells Plain and Nyanga), one rural (Worcester) and one peri-urban (Paarl-East). There were five cases from each police station for each of the 15 years studied. From 1999 to 2014, Paarl-East had 626 FRCs, Worcester had 1313, Nyanga had 5727 and Mitchells Plain recorded 3966 FRC cases (Brown *et al.* 2015).

Figure 2-11 shows the number of murders in South Africa as well as the WC from 2004/2005 until 2013/2014. The number of murders was highest in South Africa in 2005/2006 at 19 202. The highest numbers of murders in the WC were in 2013/2014 at 2 909 (Brown *et al.* 2015).

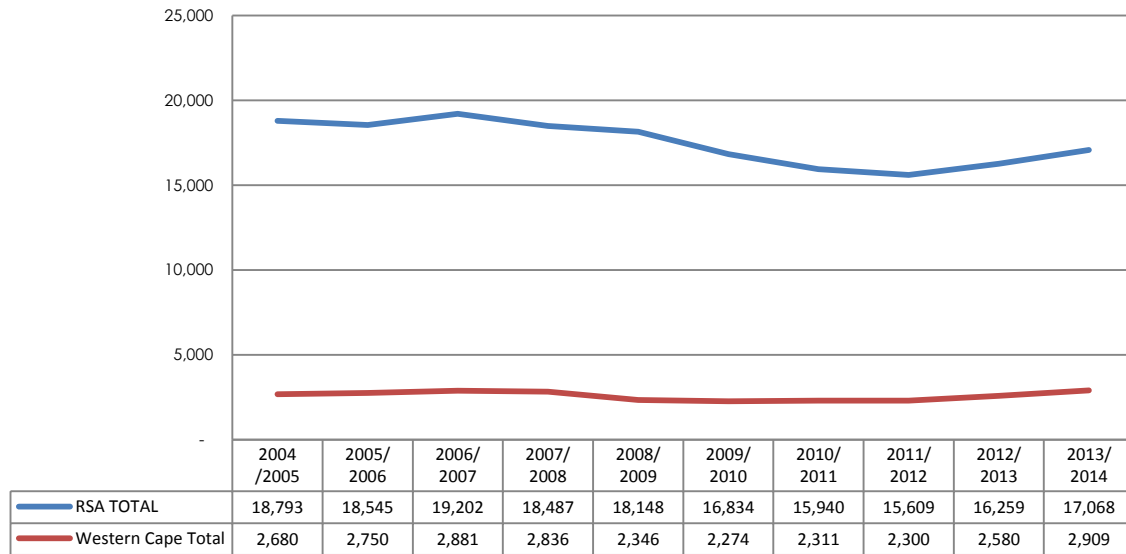


Figure 2-11: Number of murders in South Africa and the Western Cape (2004-2014)
(Brown *et al.* 2015)

Homicides due to firearms seem to be more common in more densely-populated areas and gang-dominated areas and statistics suggest that in the WC, three people are killed with a firearm each day. Gang-related killings have been in the spotlight for a while, especially due to the ongoing gang violence in areas such as Bonteheuwel, Manenberg, Phillipi, Nyanga, Hanover Park and Mitchells Plain (Brown *et al.* 2015).

Table 2-18 shows the variation in firearm related murders in the WC. What is surprising is that even though Nyanga and Khayelitsha have the highest number of murders, the percentages of those murders that are due to firearms are much lower than in other areas (Brown *et al.* 2015).

Table 2-18: Police stations with the most firearm murder victims in the WC: 2011/2012.

Police station	Murders in 2011/2012	Firearm-related murders	% Firearm-related murders
Belhar	14	12	85.71
Steenberg	22	13	59.09
Bishop Lavis	52	29	55.77
Elsies River	27	15	55.56
Mitchells Plain	67	32	47.76
Mfuleni	52	23	44.23
Muizenberg	26	11	42.31
Khayelitsha	153	63	41.18
Harare	119	41	34.45
Nyanga	226	74	32.74
Phillipi East	55	18	32.73
Manenberg	31	10	32.26
Langa	34	10	29.41
Delft	82	24	29.27
Gugulethu	114	33	28.95
Kraaifontein	90	22	24.44
WC-TOTAL	2290	596	26.03

(Brown *et al.* 2015)

Table 2-19 shows the trend in the number of murders and those that were committed with a firearm. The number of murders peaked in 2006/2007 and reached its highest point in 2013/2014. The percentage of firearm murders with respect to all murders was at its highest in 2009/2010 at 36.46%, when the murder rate was at its lowest (Brown *et al.* 2015). In 2010/2011, there was however, an increase in the number of licences granted and increases in corruption surrounding firearms. Between the years 1999 and 2015 there were 831 619 new individual firearm licences issued. In 2011/2012 alone, 10 774 licences were issued. From 2004 until October 2014, 209 967 licence renewal applications were submitted. This can be seen in Figure 2-12, which may explain the increase in the percentage of firearm deaths (Brown *et al.* 2015).

Figure 2-13 shows the trends in various FRCs, before and after the implementation of the FCA. There was a stabilisation of business robbery, murder and unlawful possession of firearms or ammunition in 2004/2005. However, since then until 2013/2014, there was a 36.6% increase in unlawful possession of firearms and ammunition, a 68.6% increase in murder and a 62.8% increase in business robbery. Attempted murder increased by 46.3% (Brown *et al.* 2015).

Table 2-19: Breakdown in murders and firearm-related murders in the WC from 2005 to 2014

Year	Number of murder cases	Number of firearm-related murder cases	Percentage firearm-related murders (%)
	2680	612	22.84
2005/2006	2750	652	23.71
2006/2007	2881	774	26.87
2007/2008	2836	617	21.76
2008/2009	2346	497	21.18
2009/2010	1174	428	36.46
2010/2011	2311	540	23.37
2011/2012	2300	590	25.65
2012/2013	2580	797	30.89
2013/2014	2909	1032	35.48

Adapted from Brown *et al.* (2015). Percentage firearm-related murders the number of firearm related murders with respect to the total number of murders in the WC between 2005 and 2014

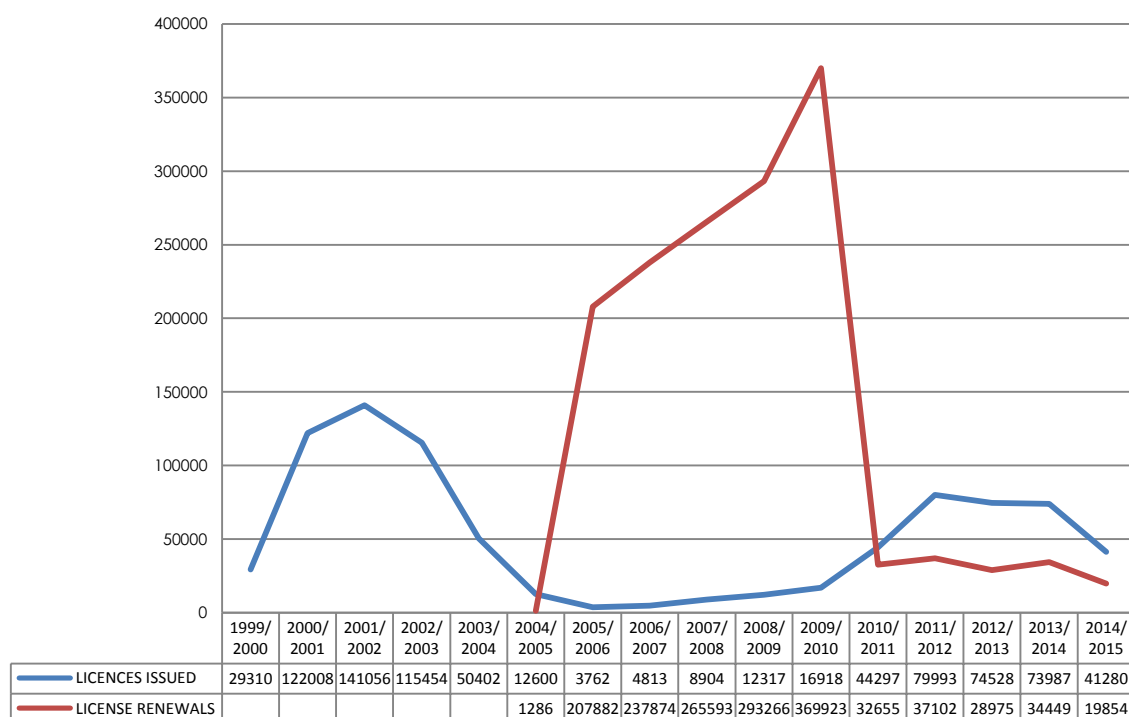


Figure 2-12: Total number of firearm licenses issued and renewed each financial year

Areas that are left open are where no information is available. Obtained from Brown *et al.* 2015

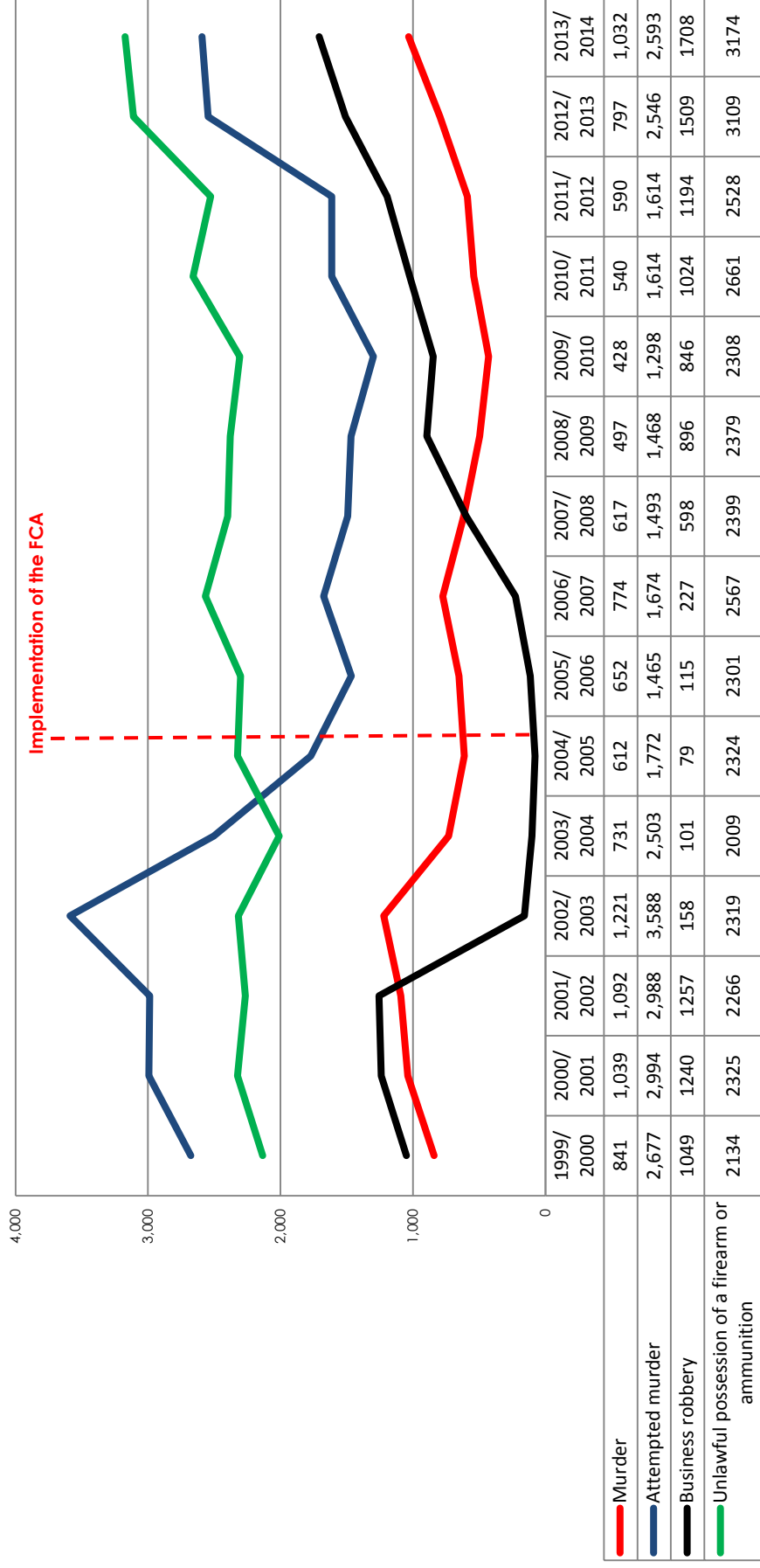


Figure 2-13: Trends in firearm related crimes pre- and post-FCA implementation (1999-2014) in the WC
(Brown *et al.* 2015)

Table 2-20 is a breakdown of the 300 case dockets that were used for the Brown *et al.* (2015) study in which various FRCs were covered.

Table 2-20: Summary of the types of cases investigated by Brown *et al.* (2015)

Crime category	Mitchells Plain	Nyanga	Paarl East	Worcester	Total	% Contribution
Armed robbery	34	20	6	16	76	25.3%
Attempted murder	6	13	11	12	42	14.0%
Murder	3	12	6	6	27	9.0%
Common assault	1	6	2	6	15	5.0%
Robbery	2	5	3	0	10	3.3%
Sexual crime	1	2	0	1	4	1.3%
Domestic violence	2	1	0	0	3	1.0%
Malicious damage to property	0	0	3	0	3	1.0%
Damage to property	0	0	2	0	2	0.7%
Attempted armed robbery	2	0	0	0	2	0.7%
Assault	1	1	0	0	2	0.7%
House robbery	0	0	0	1	1	0.3%
Public violence	0	0	1	0	1	0.3%
Total firearm as weapon to commit a crime	52	60	34	42	188	62.7%
Unlawful possession of a firearm and ammunition	4	10	31	12	57	19.0%
Pointing of a firearm	5	4	4	9	22	7.3%
Theft of firearm	8	1	3	1	13	4.3%
Negligent handling of a firearm	2	0	1	7	10	3.3%
Unlawful discharge of a firearm	2	0	0	2	4	1.3%
Loss of a firearm	0	0	0	1	1	0.3%
Illegal possession of a firearm and ammunition	2	0	2	0	4	1.3%
Unfit to possess a firearm	0	0	0	1	1	0.3%
Total firearm specific crimes	23	15	41	33	112	37.3%
TOTAL	75	75	75	75	300	100.0%

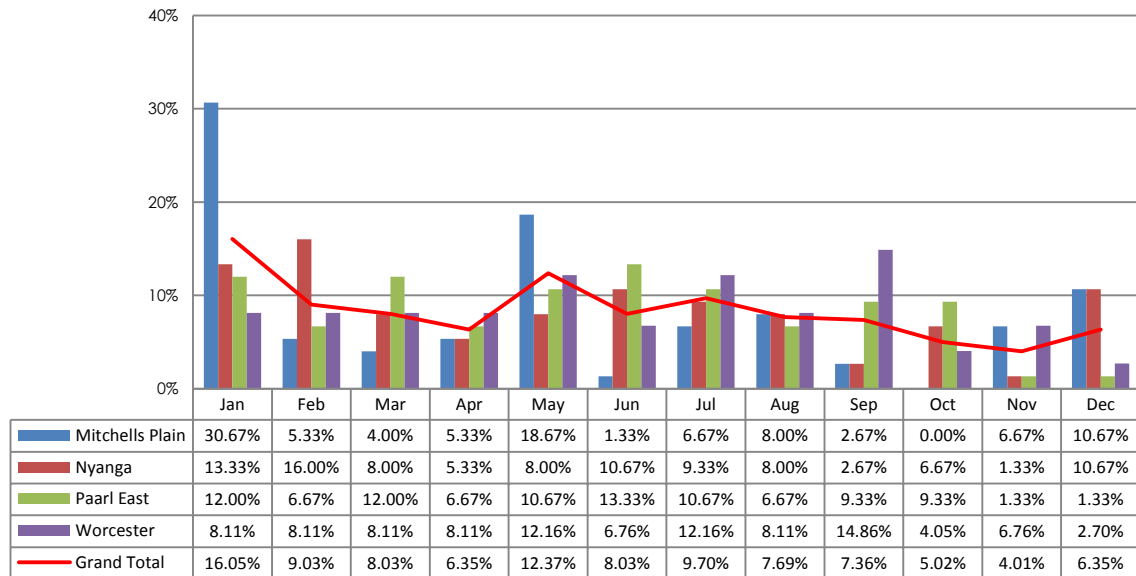


Figure 2-14: Monthly frequency of FRCs
(Brown *et al.* 2015)

Part of the study was to try and establish some type of pattern of FRCs. Figure 2-14 above shows that FRCs are more common in January, but the total between the four police stations can mainly be attributed to the large number of crimes in Mitchells Plain in January (Brown *et al.* 2015).

Figure 2-15 shows the trends according to day of the week, with the weekends seeing more FRCs. In Mitchells Plain, Paarl-East and Worcester most of the FRCs occur on Sundays, in Nyanga it is on Fridays. The lowest points in Mitchells Plain and Nyanga are on Wednesdays, with Nyanga having as low a number of FRCs on Thursdays, in Paarl East it is on Mondays and in Worcester it is on Mondays and Thursdays (Brown *et al.* 2015).

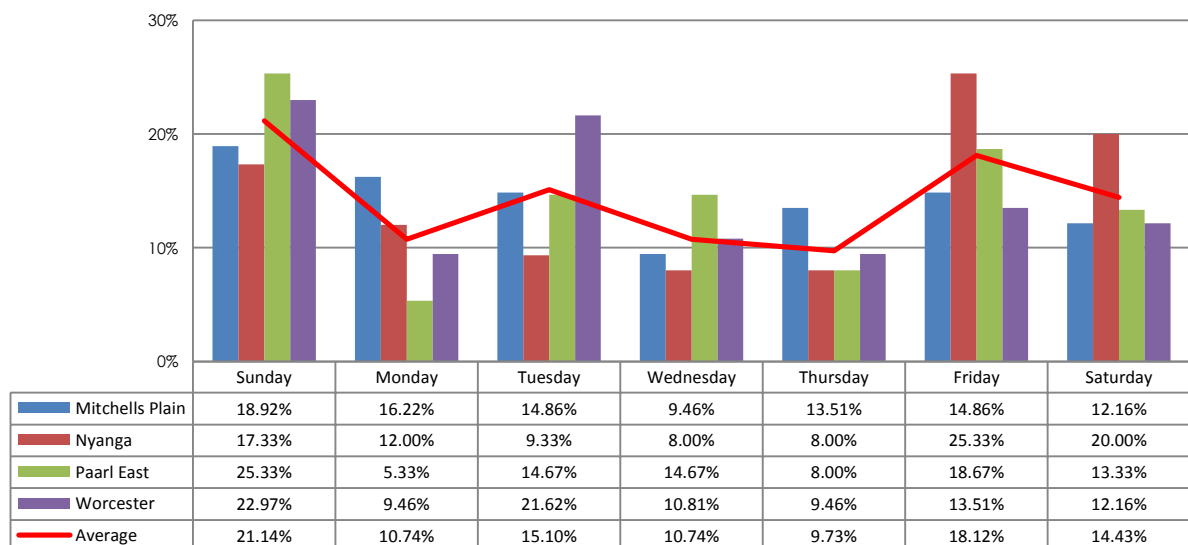


Figure 2-15: Daily frequencies of FRC
(Brown *et al.* 2015)

Figure 2-16 shows the frequency of these crimes during the specific times of the day. FRCs are more likely to occur during the night, between 18:01 and 24:00 in all the areas (Brown *et al.* 2015).

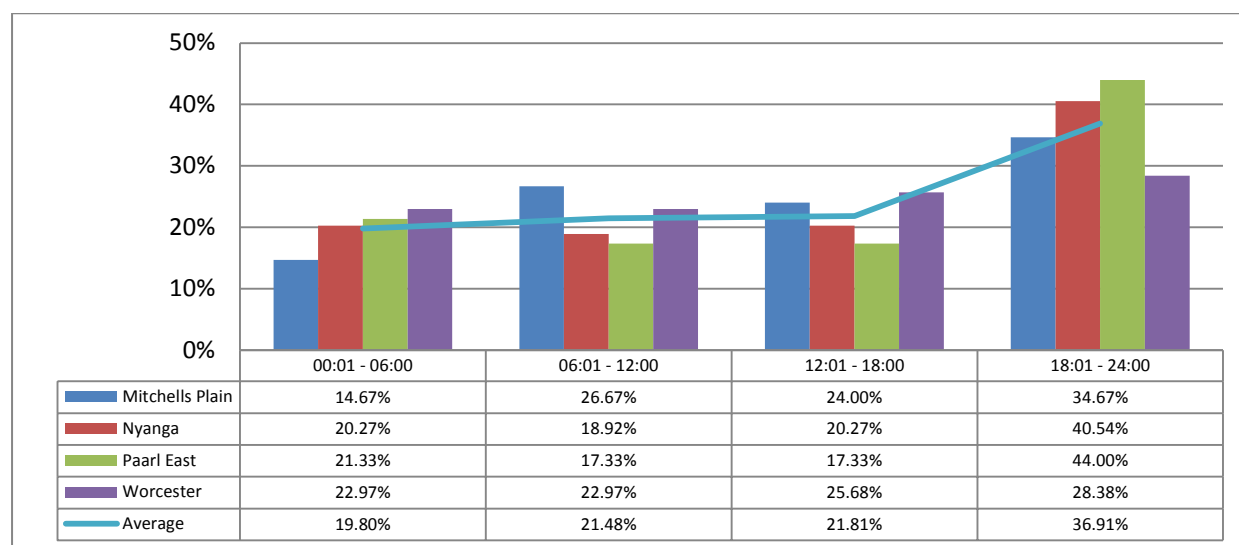


Figure 2-16: Distribution of time that FRCs occurred
(Brown *et al.* 2015)

Table 2-21: Age and sex profile of the perpetrators of FRCs

Sex	0 - 18	18 - 35	36 - 55	OVER 55	TOTAL
Male	8.6%	68.6%	19.3%	0.7%	97.2%
Female	0.0%	2.1%	0.7%	0.0%	2.8%
TOTAL	8.6%	70.7%	20.0%	0.7%	100.0%

Adapted from Brown *et al.* (2015)

In this study, the majority of perpetrators were males between the ages of 18 and 35 at 68.6%. Overall, 97.2% of the perpetrators were male (Table 2-21) (Brown *et al.* 2015).

Figure 2-17 shows the different outcomes of the 300 cases investigated. On average 18.7% of cases resulted in a conviction. The conviction rate was highest in Paarl East at 47.7% and lowest in Mitchells Plain at 5.3%, where the majority of cases were undetected. These conviction rates are quite high, when compared to the 7.2% overall found by Liebenberg (2004), but this study included other crime types, whereas Liebenberg (2004) only included firearm related deaths (Brown *et al.* 2015).

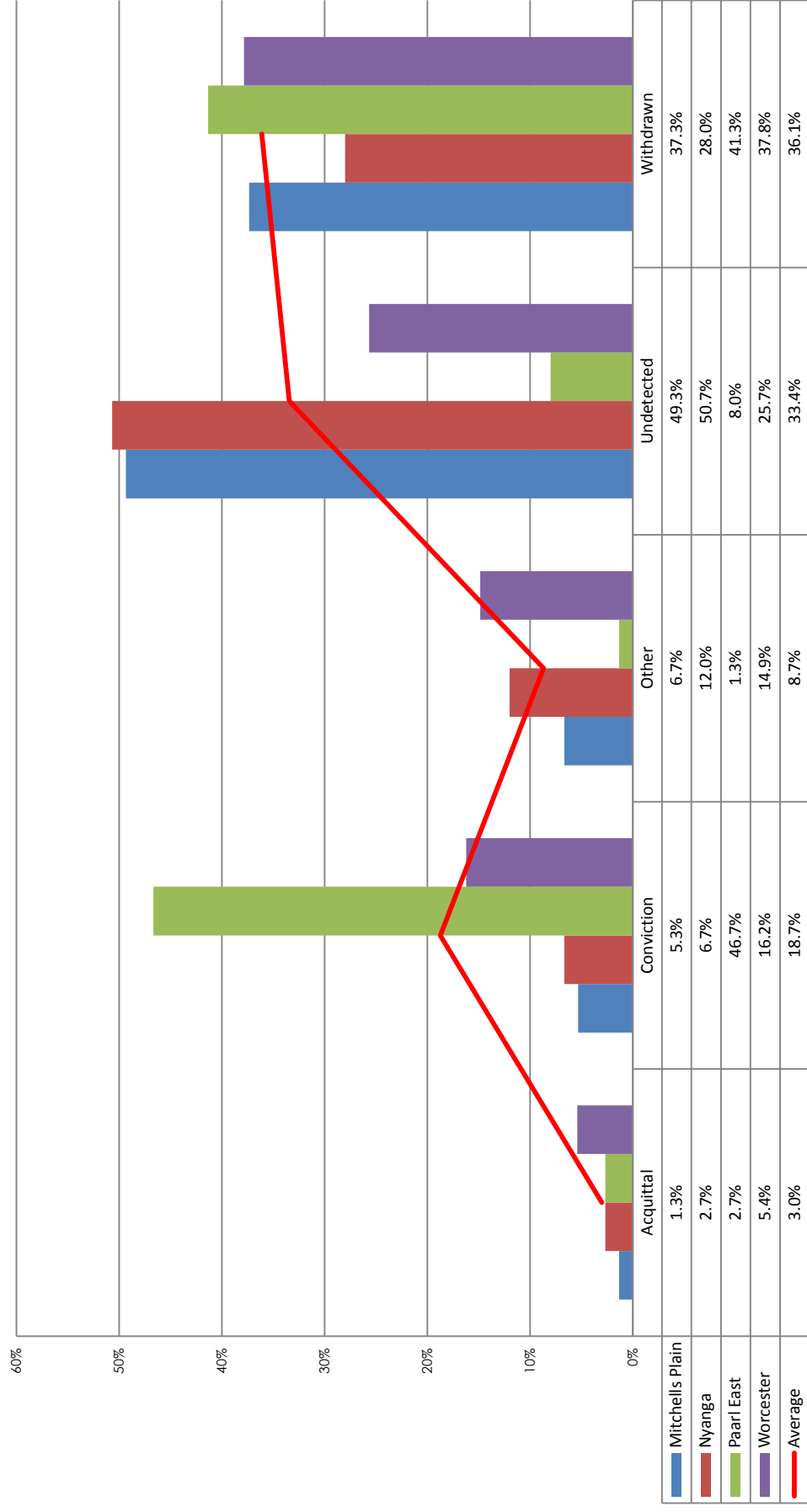


Figure 2-17: Outcomes of the FRCs
(Brown *et al.* 2015)

Table 2-22 indicates the time it took to obtain a conviction. On average, between the four police stations, it took 474 days (± 16 months) to obtain a conviction. The process took almost three times as long at Nyanga at 1257 days (± 42 months). The process was fastest at Mitchells Plain at 145 days until conviction (± 5 months) (Brown *et al.* 2015).

Table 2-22: Time duration to obtain conviction

Police station	Conviction cases	Total duration in days	Average number of days for a conviction
Mitchells Plain	4	580	145
Nyanga	5	6 286	1 257
Paarl East	35	12 092	345
Worcester	16	9 486	593
Total	60	28 444	474

(Brown *et al.* 2015)

The average time duration from reporting of a case to withdrawal, was 415 days (± 14 months) as can be seen from Table 2-23. The shortest duration was in Worcester at 192 days (± 6 months) and the longest duration was at Mitchells Plain at 546 days (± 18 months) (Brown *et al.* 2015).

Table 2-23: Time duration of cases that was withdrawn.

Police station	Withdrawn	Total duration in days	Average number of days for a case to be withdrawn
Mitchells Plain	29	15 830	546
Nyanga	21	8 874	423
Paarl East	30	15 446	515
Worcester	31	5 944	192
Total	111	46 094	415

Adapted from Brown *et al.* (2015)

Brown *et al.* (2015) concluded that some decreases in FRCs were seen after the implementation of the FCA, until about 2009, however from 2010/2011 there has been an increase in serious crime. There was specifically an increase in the use of firearms in murders and attempted murders. This increase coincides with the period where there was an increase in the number of firearm licences issued, which suggests a link between the extent of FRC and the number of firearms in circulation (Brown *et al.* 2015).

Effect of the new legislation on firearm related crimes and death

The results from Brown *et al.* (2015) is not entirely consistent with what was previously studied, where it was found that crime as a result of firearms decreased by 21.8 % from 2004/2005 to 2012/2013 (Redpath, 2012).

In 2011/2012, 11 980 firearms were destroyed and 56 051 in 2012/2013. In 2012/2013 there were 16 259 homicides (Redpath, 2012). Since the peak of overall crime rates in 2002/2003, there was a steady decrease of 25% leading up to 2007/2008. From 2007/2008 to 2009/2010 however, there was a 45% increase. Changes in the five property-related crime categories can, however, explain 97% of this increase in crime rate. There were substantial increases in shoplifting, commercial crime, residential burglary and non-residential burglary rates. Even though there was an increase in property-related crime, there was a decrease in the rate of interpersonal violence. There was an 8.9% decrease in murder rates, a 7.4% decrease in attempted murder, aggravated robbery decreased by 3.9% and there was a 2.3% decrease in assault with the intent to inflict grievous bodily harm (Burger, Gould & Newham, 2014) (Burger, 2009).

A retrospective study was conducted using data from mortuaries in five South African cities (Cape-Town, JHB, Pretoria, Durban and PE) for the years 2001 to 2005 (Matzopoulos, Thompson & Myers, 2014). From 2001 until 2005 there was a 13.6% decrease in firearm homicides and the study indicated that the decline in firearm homicides was consistent after the introduction of the new act. It is also suggested that approximately 4 585 lives were saved by the new act. The study suggests that the decline is possibly due to the decrease in firearms among the licensed gun owners and criminals who could have stolen guns from the selection of registered weapons. In 2010 firearm deaths accounted for 32% of homicides as opposed to 42% during the study of 2001 until 2005 (Matzopoulos, Thompson & Myers, 2014). It seems as if there was a greater decrease in FRCs before the FCA was fully in place in 2004 and that the increase in gun licences in 2010/2011 is followed by an increase in FRC once again. There was a recommendation by the Western Cape Government that there should be another amnesty period (Western Cape Government, 2015).

Several firearm amnesty periods were declared previously to help regulate firearms and deal with the large numbers of illicit or illegal firearms (Brown *et al.* 2015). The first amnesty was a 24-hour period in 1994, where 900 firearms were surrendered. In 2005 there was a much larger amnesty, during which 100 006 firearms were surrendered (Brown *et al.* 2015). During the first three months of the 2005 amnesty period (January to March 2005), 59 301 firearms and components were handed

in, of which 28 409 were voluntary hand-ins. Forty-three per cent of all firearms and components were illegal (Brown *et al.* 2015; Kirsten, 2015). The third amnesty period was declared in 2010 during which over 32 169 firearms were handed in, of which 27% were illegal (Brown *et al.* 2015).

It is universally thought that the firearm amnesties led to a decrease in crime, however, there is no significant evidence to support this. It is difficult to determine the impact of firearm amnesties, because there are so many contributing factors. After the 2005 amnesty period which delivered approximately 100 000 firearms, there was a noticeable decrease in FADs in 2006, however, this was part of a continuous decrease that started in 2001 and this reduction was linked to other violence-reduction procedures (Lamb, 2010). There is still a strong possibility that the 2005 amnesty contributed to the reduction in firearm deaths, however, this is difficult to prove. The most noticeable effect that the firearm amnesties could have on firearm deaths, is reducing the number of firearms available to cause these deaths (Kirsten, 2005; Lamb, 2010). It can also be argued that the amnesties increased public awareness about the need to remove firearms from society and also about the firearms control act (Kirsten, 2005).

FCA amendment

The national firearms summit was held in March last year (2015), and was dedicated to control the increase of available guns in South Africa. There are strong on going debates from the pro- and anti-gun lobbies. The civilian secretariat of police stated that more than 1 900 firearms of police, defence force and correctional services, have gone missing during the past year. A draft of the Firearms Control Amendment Bill is currently before parliament and this would likely indicate that all firearms should undergo ballistic testing and microdots for tracing, allowing traceability even when serial numbers are removed or altered. There will also be a limit to the number of firearms an individual can register for, including sporting purposes, and a minimum sentence of five years will be proposed for any crime where a firearm was used (Davis, 2015).

Conclusion

Firearms attract attention, in terms of popular news and research, due to so many stakeholders and as it is a leading cause of death, specifically in South Africa. Since the 1999 study by Liebenberg (2004) there has been several changes with regards to the legal processes surrounding the firearms, including the introduction and implementation of the FCA.

There is a vast amount of literature available on the victimology of FADs, as it is included in annual crime statistical analysis and as the NIMSS project specifically looks at victimology of various types of non-natural deaths. When assessing victimology with the view of comparisons, however it is important to examine the specific geographical area of interest, and for the purposes of this study it is the CWM. Metropolitan areas differ significantly from non-metropolitan areas, which make direct comparison difficult when not looking at the same type of area. For the purpose of this study, direct comparison is the aim and therefore it is important to specifically look at the victimology of FADs in the CWM, even though there is a lot of literature on the victimology of FADs nationally. Of particular interest to this study is the trend of FADs seen in the CWM, with a decrease in the number of FADs observed from 2003 and a large decrease seen in 2004, the same period that the FCA was fully implemented. This decrease continues until it reaches the lowest point in 2009 at 281 FADs. In 2010 there is a slight increase again, interestingly in the same period as the second firearms amnesty period. These trends are interesting and warrants further investigation, particularly at the point where there were the fewest FADs, 2009. It would be interesting to see a detailed picture of FADs during this year, which is also 10 years after the initial study by Liebenberg (2004) was conducted.

One area where there is a lack of research is the area of investigative outcomes of these deaths. It is important to see what happens after an individual has died due to a firearm related injury.

There has been a few studies looking at the conviction rates, but these are mostly focused on general crime rates. Brown *et al.* (2015) specifically looked at conviction rates of FRCs in the WC, however a limitation of this study was that all FRCs were included, but not analysed separately, which does not allow for easy comparisons. This study did look at cases over a long time period (1999 until 2014), but considering that this means only five cases from each of the four police stations were examined, it does not provide a complete picture of what is really happening. Only considering four police stations in the Western Cape is a limitation, as the number and type of cases vary greatly among the different precincts, and the police stations and CJS functions differently in the different precincts. Most of the focus was also on conviction rates, which is what researchers are

mostly interested in, however it does not say much about the cases that do not have a court verdict. Conviction rates can create a picture of what is happening, but if they are low, it is important to show where things can possibly have gone wrong, in order to assess how to improve the process. Seeing that information is available on all the investigative outcomes for FADs in the CWM in 1999, it would be interesting to see how cases compare after the implementation of the FCA. Looking at the year with the fewest number of FADs in the CWM could potentially provide interesting results, which it did.

These results lent itself to more literature searches which is discussed in Chapter 3.

Following this chapter is a publication-ready manuscript, which focuses on the comparison of the investigative outcomes between 1999 and 2009. This chapter will show how there were decreases in the number of FADs seen at SRMLL, but no improvement in the investigative and judicial processes. Due to the large amount of data collected an extra chapter (Chapter 4) is included to discuss the victimology of FADs in 2009, and includes a comparison between 1999 and 2009 FADs, in terms of victimology. There is no methods chapter, but the methodology is explained in Chapter 3 (methodology for the investigative outcomes) and Chapter 4 (methodology for the victimology).

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Chapter 3 Publication-ready manuscript

The journal chosen for the publication-ready manuscript is the South African Crime Quarterly (SACQ). The manuscript focuses on the investigative outcomes, specifically the comparison of the results from the 1999 and 2009 studies, which is the area that would be of most interest to the readers. The reason the comparison between the two studies is important, is because the cases that formed part of the 1999 study occurred well before the introduction of the new Firearms Control Act (FCA) of 2000 whereas the cases from the 2009 study occurred well after the introduction and implementation of the FCA. We aimed to establish whether the new legislation affected the number of FADs as well as the investigative outcomes.

SnapSHOT in time of the investigative outcomes of firearm-related deaths in the Cape Western Metropole: A 1999 and 2009 comparison study.

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Abstract

In 2000 the Firearms Control Act (1) of 2000 was enacted and from 2001 to 2005 there was said to be a 13.6% decrease in firearm homicides and this decrease was consistent after the complete introduction of the new act. In an attempt to see whether this new legislation has impacted firearm related crimes, two studies were conducted and compared firearm related death cases that occurred in the Cape Western Metropole. The first study looked at firearm deaths that occurred in 1999 and their investigative outcomes by 2004, the second looked at deaths in 2009 and the outcome by 2014. Even though there were significantly fewer firearm deaths in 2009 than in 1999, there has been no improvement in the firearm homicide conviction rate. With a conviction rate of 7.21% for 1999 and 5.69% for 2009 it puts the efficacy of the criminal investigative skills of the police and the prosecution service in question.

Introduction

South Africa has a long history of gun violence, particularly politically motivated. Firearms were used in the colonial era to control and rule the indigenous South Africans and it also had a prominent role in the apartheid era when many individuals came to their death due to guns.¹ There was an increase in crime in South Africa from the mid-1980's, with an even more dramatic increase in the early 1990's. Violent crime was expected to decrease after 1994, but these expectations did not materialise.² Gun violence showed a similar pattern, even though politically motivated gun violence did subside after 1994. Nonetheless, due to poverty and unemployment as well as the illegal drug trade, there was an increase in criminal gun violence.^{1,2}

In 1994 the need for stricter firearm control was addressed by the anti-firearm association, Gun Free South Africa and the government initiated the examination process into the existing legislation.¹ The governing legislation controlling the use and distribution of firearms and ammunition is the Firearms Control Act (1) of 2000 (FCA) and the Firearms Control Regulations (FCR), which is the subsidiary legislation. Between 2000 and 2004 there was a firearm-access gradient and by 2004 the FCA was in full effect and replaced the Arms and Ammunition Act 75 of 1969 (the 1969 AAA).^{3,4} The intention of reducing the numbers of firearms in circulation, firearm-related crimes (FRCs) and firearm deaths (FADs) was undoubtedly one of the principle aims of the new legislation, whilst amnesties were intended to reduce the numbers of illegal firearms. In order to legally own a firearm one must apply for a competency certificate, a licence and a permit or authorisation. One must also be deemed fit, proper, not inclined to violence, mentally stable and not dependant on any intoxicating or narcotic substances. There are various specific provisions involved in competency certificates, and investigations may be launched to determine whether an applicant qualifies for a competency certificate.⁴

Literature review

Murder in South Africa

Anti-gun lobbyists such as Gun Free South Africa saw a need for new firearm legislation, primarily due to South Africa's high crime rates, specifically FRCs. In South Africa overall crime rates are reported according to the South African Police Service (SAPS) financial year (1 April until 31 March). Murder rates peaked in 1995/1996, at a rate of 67,9 per 100 000. In 2008/2009 the murder rate was 37.3 per 100 000, indicating a 45% drop between 1995/1996 and 2008/2009.⁵ Nevertheless, in 2009

homicide was still the leading cause of non-natural deaths at 36.2%. This was followed by transport-related deaths, at 33.8% of injury-related deaths.⁶ Even though this remarkable decrease in homicides between 1995/1996 until 2008/2009 was very welcome news, it was still almost five times higher than the global rate of 7.6 per 100 000.^{5,7}

The role of firearms in homicide

Firearms are known to contribute greatly to the murder rates and in 2004 firearms accounted for 46% of all violence-associated deaths, making it the leading cause of violence-associated deaths in South Africa. There was a 7:1 ratio of male to female firearm-associated victims with the 25 to 29 year age group predisposed to firearm-associated violent deaths.⁸

In 2009, 29% of homicides were due to firearms. In the WC alone this was 21.8%. The highest percentage of homicides due to firearms was in Kwa-Zulu Natal at 42.3%. The most common method of homicide in 2009, nationally, was sharp force. Sharp force accounted for 43.8% of male homicides and 30% of female homicides.⁶ Table 3-1 indicates the number of firearm and non-firearm related homicides by province for 2009.

Table 3-1: Provincial distribution of firearm and non-firearm homicide (weighted)

Province	Firearm		Non-firearm		Total	
	n	%	n	%	n	%
Eastern Cape	579	16.7	2897	83.3	3458	100
Free State	111	11.5	858	88.5	970	100
Gauteng	1760	39.7	2676	60.3	4436	100
KwaZulu-Natal	2023	42.3	2756	57.7	4779	100
Limpopo	162	18.8	699	81.2	860	100
Mpumalanga	222	33.2	446	66.8	668	100
North West	107	12.9	722	87.1	829	100
Northern Cape	21	3.4	586	96.6	607	100
Western Cape	529	21.8	1893	78.2	2422	100
Total	5513	29	13515	71	19028	100

Adapted from Matzopoulos et al. (2013)

Even from the few publications referenced, it is clear that South Africa has a problem with crime and gun violence.

According to the Centre for the Study of Violence and Reconciliation (2010), there was a decline in deaths due to interpersonal violence from 45% in 2000 to 35% in 2007. There was also a decline in the percentage of violent deaths due to firearms, where in 2000 it was 53% and in 2007 it was 36%. In the Johannesburg Metropole there was a drastic decrease in firearm homicides from 2003 to 2004. In eThekweni there was a steady decrease from 2003 to 2007. In Cape Town there was a decrease between 2003 and 2004 and then a slight increase from then until 2007. In Tshwane, firearm homicide numbers are quite variable, but are the lowest of all four metropolitan areas.⁹

A retrospective study was conducted using data from mortuaries in five South African cities (Cape-Town, Johannesburg, Pretoria, Durban and Port-Elizabeth) for the years 2001 to 2005.¹⁰ From 2001 until 2005 there was a 13.6% decrease in firearm homicides and the study indicated that the decline in firearm homicides was consistent after the introduction of the FCA. It is also suggested that approximately 4585 lives were saved by the new act, however because there was an accompanying decrease in the overall murder rate it cannot be stated explicitly that 4585 lives were saved exclusively by the FCA. The study suggests that the decline is possibly due to a decrease in licensed firearm owners, thereby reducing the pool of available firearms that may be targeted for theft. In 2010 firearm deaths accounted for 32% of homicides as opposed to 42% during the study of 2001 until 2005.¹⁰ It seems as if there was a greater decrease in FRCs before the FCA was fully in place in 2004 and that the increase in gun licences in 2010/2011 caused an increase in FRC once again. The Western Cape Government made a recommendation that there should be another amnesty period.¹¹

Several firearm amnesty periods were declared in the past to help regulate firearms and deal with the large numbers of illicit or illegal firearms. The first amnesty was a 24-hour period in 1994, where 900 firearms were surrendered. In 2005 there was a much longer amnesty, during which 100 006 firearms were surrendered.³ During the first three months of the 2005 amnesty period (January to March 2005), 59 301 firearms and components were handed in, of which 28 409 were in the voluntary hand-in category. Forty three per cent of all firearms and components were illegal.^{3,12} The third amnesty period was declared in 2010 during which over 32 169 firearms were handed in, of which 27% were illegal.³

It is universally thought that the firearm amnesties led to a decrease in crime, however, there is no concrete evidence to support this. It is difficult to determine the impact of firearm amnesties, because there are so many contributing factors. After the 2005 amnesty period which delivered

approximately 100 000 firearms, there was a noticeable decrease in FADs in 2006, however, this was part of a continuous decrease that started in 2001 and this reduction was linked to other violence-reduction procedures.¹³ There is still a strong possibility that the 2005 amnesty contributed to the reduction in firearm deaths, however this is difficult to prove quantitatively. The most noticeable effect of firearm amnesties on firearm deaths is by reducing the number of available firearms to cause these deaths.^{12,13} It can also be argued that the amnesties increased public awareness about the need to remove firearms from society and also informed the public about the firearms control act.¹²

Firearm related crime analysis by the Department of Community Safety

A study conducted by the Western Cape Government, Department of Community Safety, investigated the possible effects of the FCA and other aspects of FRC and was published by Brown *et al.* (2015). This was a national study conducted under the instruction from the Civilian Secretariat of Police. Each province was required to conduct research on the FCA implementation and to review case dockets of FRCs that occurred between 1999 and 2014.³ Brown *et al.* (2015) intended the following for this study:

- Examine existing data on FRC in South Africa and the WC
- Examine the implementation of the FCA
- Identify problems that the SAPS encounter whilst enforcing the FCA in the WC

As part of fulfilling the aims, they examined 300 SAPS dockets from 1999 to 2014. Four police stations were used; two urban (Mitchells Plain and Nyanga), one rural (Worcester) and one peri-urban (Paarl-East). There were five cases from each police station for each of the 15 years studied. From 1999 to 2014, Paarl-East had 626 FRCs, Worcester had 1313, Nyanga had 5727 and Mitchells Plain recorded 3966 FRC cases.³

Homicides due to firearms seem to be more common in more densely-populated areas as well as in gang-dominated areas and statistics suggest that in the WC three people are killed with a firearm each day. Gang-related killings have been in the spotlight, especially due to the on-going gang violence in areas such as Bonteheuwel, Manenberg, Phillipi, Nyanga, Hanover Park and Mitchells Plain.³

Table 3-2 shows the trend in the number of murders and those that were committed with a firearm. The number of murders peaked in 2006/2007 and reached its highest point in 2013/2014. The percentage of firearm murders with respect to all murders, was at its highest in 2009/2010 at

36.46%, when the murder rate was at its lowest. Figure 3-1 shows the trend in firearm licences issued and licence renewals. In 2010/2011, there was an increase in the number of licences granted and increases in corruption surrounding firearms.³ Between the years 1999 and 2015 there were 831 619 new individual firearm licences issued. In 2011/2012 alone, 79 993 licences were issued, which can be seen in Figure 3-1, which might explain the increase in the percentage of firearm deaths.³

Table 3-2: Breakdown in murders and firearm-related murders in the WC from 2005 to 2014

Year	Number of murder cases	Number of firearm-related murder cases	Percentage firearm-related murders (%)
2004/2005	2680	612	22.84
2005/2006	2750	652	23.71
2006/2007	2881	774	26.87
2007/2008	2836	617	21.76
2008/2009	2346	497	21.18
2009/2010	1174	428	36.46
2010/2011	2311	540	23.37
2011/2012	2300	590	25.65
2012/2013	2580	797	30.89
2013/2014	2909	1032	35.48

Adapted from Brown *et al.* (2015). Percentage firearm-related murders the number of firearm related murders with respect to the total number of murders in the WC between 2005 and 2014

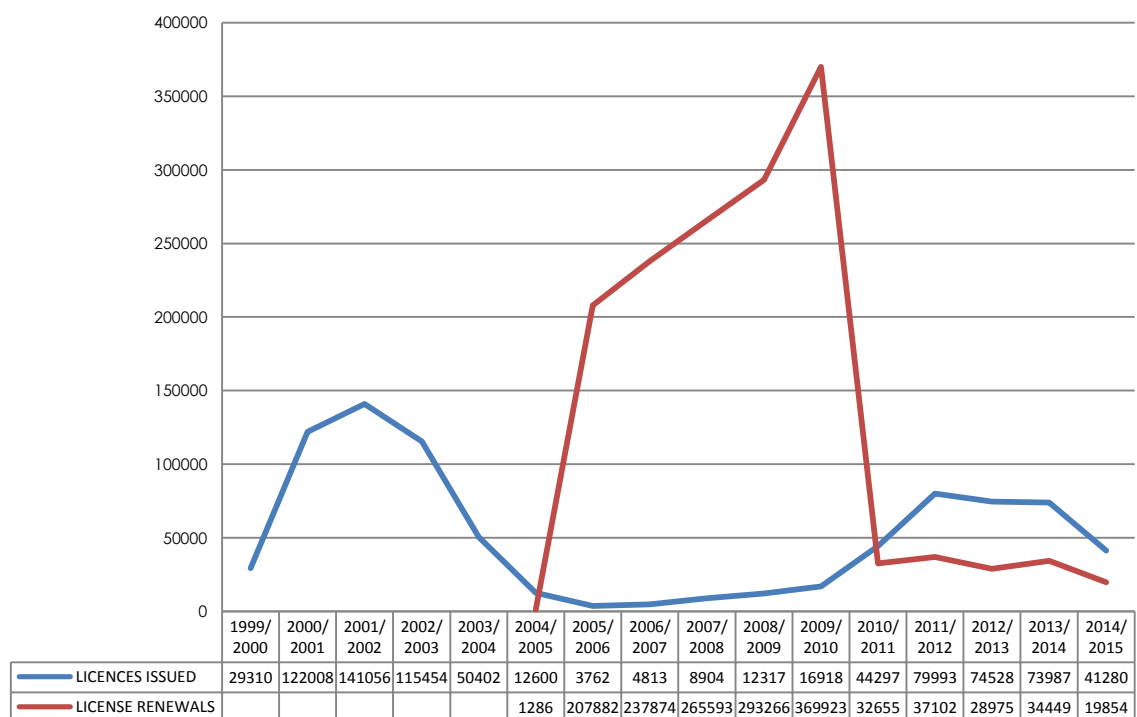


Figure 3-1: Total number of firearm licenses issued and renewed each financial year
Areas that are left open are where no information is available. Obtained from Brown *et al.* 2015

Figure 3-2 shows the trends in various FRCs, before and after the implementation of the FCA. There was a stabilisation of business robbery, murder and unlawful possession of firearms or ammunition in 2004/2005. Since then until 2013/2014, however there was a 36.6% increase in unlawful possession of firearms and ammunition, a 68.6% increase in murder and a 62.8% increase in business robbery. Attempted murder increased by 46.3%.³

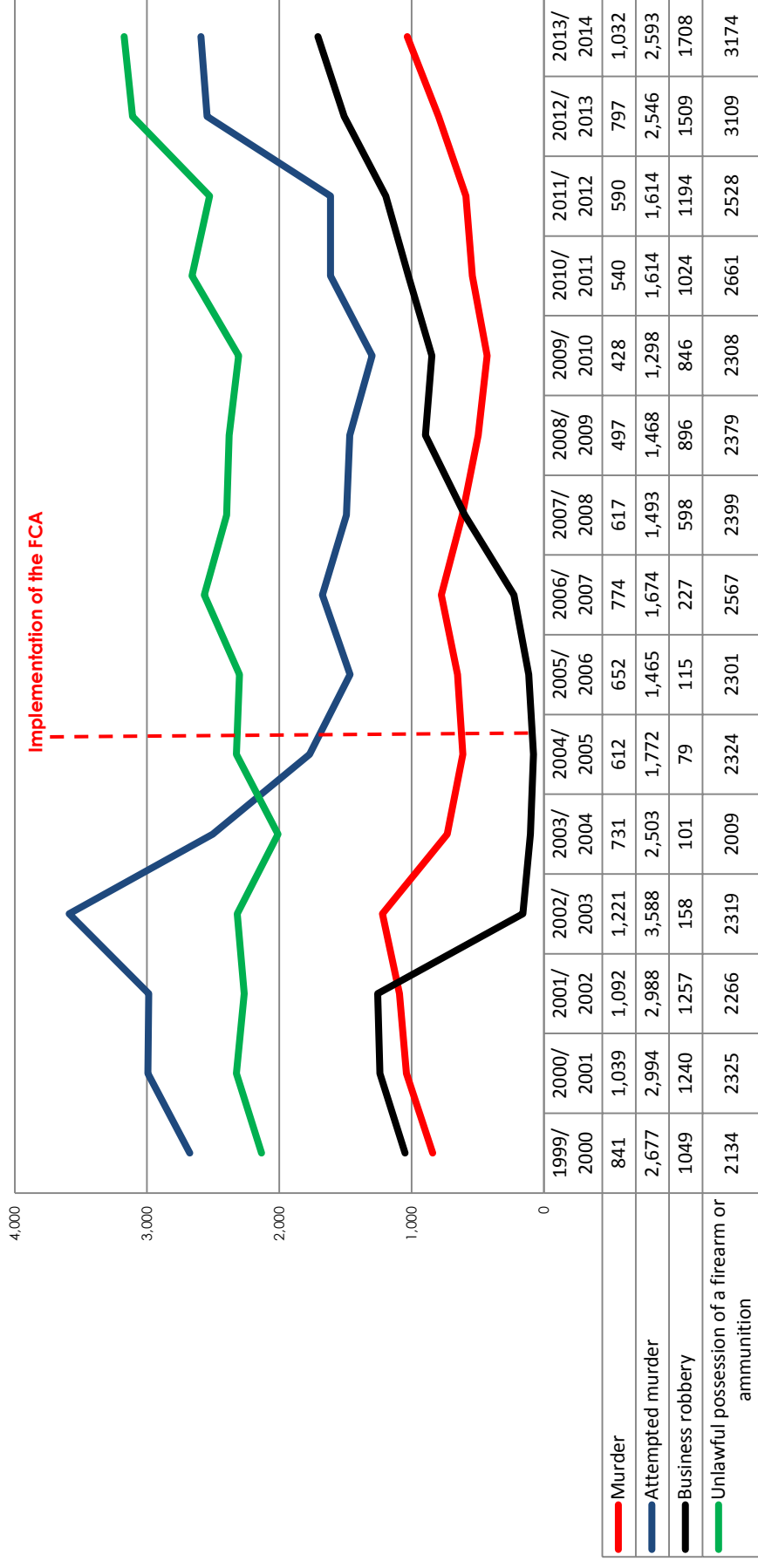


Figure 3-2: Trends in firearm related crimes pre- and post-FCA implementation (1999-2014) in the WC.³

Table 3-3 is a breakdown of the 300 case dockets that were used for the Brown *et al.* (2015) study, in which various firearm-related crimes were covered.

Table 3-3: Summary of the types of cases investigated by Brown *et al.* (2015) where n=300.

Crime category	Mitchells Plain	Nyanga	Paarl East	Worcester	Total	% Contribution
Armed robbery	34	20	6	16	76	25.3%
Attempted murder	6	13	11	12	42	14.0%
Murder	3	12	6	6	27	9.0%
Common assault	1	6	2	6	15	5.0%
Robbery	2	5	3	0	10	3.3%
Sexual crime	1	2	0	1	4	1.3%
Domestic violence	2	1	0	0	3	1.0%
Malicious damage to property	0	0	3	0	3	1.0%
Damage to property	0	0	2	0	2	0.7%
Attempted armed robbery	2	0	0	0	2	0.7%
Assault	1	1	0	0	2	0.7%
House robbery	0	0	0	1	1	0.3%
Public violence	0	0	1	0	1	0.3%
Total firearm as weapon to commit a crime	52	60	34	42	188	62.7%
Unlawful possession of a firearm and ammunition	4	10	31	12	57	19.0%
Pointing of a firearm	5	4	4	9	22	7.3%
Theft of firearm	8	1	3	1	13	4.3%
Negligent handling of a firearm	2	0	1	7	10	3.3%
Unlawful discharge of a firearm	2	0	0	2	4	1.3%
Loss of a firearm	0	0	0	1	1	0.3%
Illegal possession of a firearm and ammunition	2	0	2	0	4	1.3%
Unfit to possess a firearm	0	0	0	1	1	0.3%
Total firearm specific crimes	23	15	41	33	112	37.3%
TOTAL	75	75	75	75	300	100.0%

Figure 3-3 shows the different outcomes of the 300 cases investigated. Redpath (2012) argues that the best measure of performance of the criminal justice system (CJS) is the number of guilty verdicts relative to the number of reported crimes. This measures the extent to which the CJS addresses reported crimes and includes an assortment of contributors in state appointments, such as the police, the Magistrates or the National Prosecuting Authority (NPA), the department of correctional services and the legal aid board.¹⁴ The conviction rate would arguably also be a good measure of efficacy of new legislation. Conviction rate for crime is however, usually defined as the percentage of cases that end in a guilty verdict with respect to the number of cases finalised with a verdict. These do not consider cases that never went to court or were unreported or undetected.¹⁵

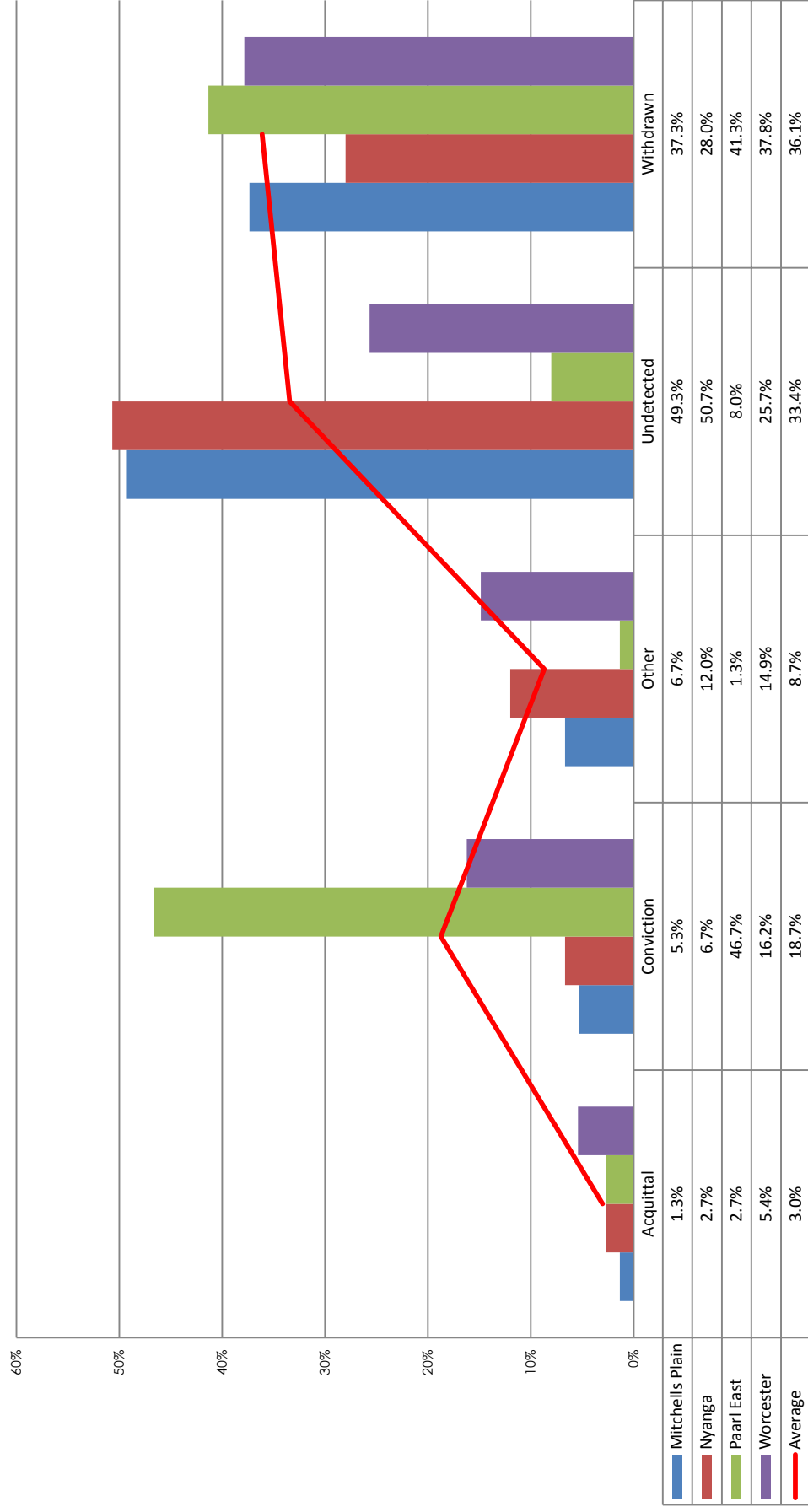


Figure 3-3: Outcomes of the FRCs.³

In the study by Brown *et al.* (2015), conviction rate refers to the number of guilty verdicts relative to the number of reported FRCs, as Redpath (2012) prefers it to be defined.

On average 18.7% of cases resulted in a conviction. The conviction rate was highest in Paarl East at 47.7% and lowest in Mitchells Plain at 5.3%, where the majority of cases were undetected.³

Table 3-4 indicates the time it took to obtain a conviction. On average, between the four police stations, it took 474 days (± 16 months) to obtain a conviction. The process took almost three times as long at Nyanga at 1257 days (± 42 months). The process was fastest at Mitchells Plain at 145 days until conviction (± 5 months).³

Table 3-4: Time duration to obtain conviction.³

Police station	Conviction cases	Total duration in days	Average number of days for a conviction
Mitchells Plain	4	580	145
Nyanga	5	6 286	1 257
Paarl East	35	12 092	345
Worcester	16	9 486	593
Total	60	28 444	474

The average time duration from reporting of a case to withdrawal, was 415 days (± 14 months) as can be seen from Table 3-5. The shortest duration was in Worcester at 192 days (± 6 months) and the longest duration was at Mitchells Plain at 546 days (± 18 months).³

Table 3-5: Time duration of cases that was withdrawn.

Police station	Withdrawn	Total duration in days	Average number of days for a case to be withdrawn
Mitchells Plain	29	15 830	546
Nyanga	21	8 874	423
Paarl East	30	15 446	515
Worcester	31	5 944	192
Total	111	46 094	415

Adapted from Brown et al. (2015)

Brown *et al.* (2012) concluded that some decreases in FRC were seen after the implementation of the FCA, until about 2009, however from 2010/2011 there has been an increase in serious crime. There was specifically an increase in the use of firearms in murders and attempted murders. This increase coincides with the period where there was an increase in the number of firearm licences issued, which suggests a link between the extent of FRC and the number of firearms in circulation.³

Other studies have been conducted on conviction rate, but these use different crime categories and not only FRCs.^{14,15,16}

More on conviction rates

The national prosecution authority (NPA) has cited a conviction rate of 88.8%, for all crimes in the 2009/2010 year, but this only considers cases that went to court.^{14,15}

In the 2005/2006 year, 517 101 new dockets were received by the NPA and only 14% of cases were prosecuted, 60% of cases were declined and 26% were referred to the police for further investigation. The NPA tends to blame poor docket preparation by the police for the withdrawals in many cases, however, in a 2007 audit of the NPA records, 55% of the withdrawals did not have a valid reason.¹⁴

The South African Law Commission conducted a study to measure the progress and outcome of a sample of 15 529 crimes reported to the SAPS and compare the outcome by crime category and police area. The cases in the sample were from crimes reported between January 1997 and April 1998 and the outcome of the cases were determined in August, September and October 1999, allowing between 16 and 33 months between reporting and finalisation of the case. There were five crime categories (murder, rape of girls under the age of 18, rape of adults, robbery under aggravated circumstances and fraud) and eight police areas [Cape Western Metropole (CWM), Boland, Port Elizabeth, Cradock, Durban, Kwa-Zulu Natal Midlands, Johannesburg and the East Rand].¹⁶

In this sample there were cases of murder, rape and robbery with aggravated circumstances, with 75% of the cases never going to court. In 4% of cases, the trial was on-going, 10% were withdrawn in court, 5% of cases had a not-guilty verdict and only 6% of cases ended in a guilty verdict. When only considering the murder cases, 61% of cases did not go to court, 12% were still in court, 8% were withdrawn, in 8% a suspect was found not guilty and in 11% of the cases there was a guilty verdict.¹⁶

From the cases specifically in the CWM that had not gone to court, 74.1% went undetected, 16.5% were withdrawn by the complainant, 7.2% was still undergoing investigation and in 2.3% of the cases a warrant was issued. When looking at murders in the CWM, 50.35% had not gone to court, in 19.42% of cases the trial was on going, 4.32% of cases were withdrawn in court, 8.63% were acquitted and only 17.27% were convicted.

Figure 3-4 depicts the conviction rate for murder in the different areas studied, and shows that it was highest in Cradock at 36.37% and lowest in Durban at 4.69%.¹⁶

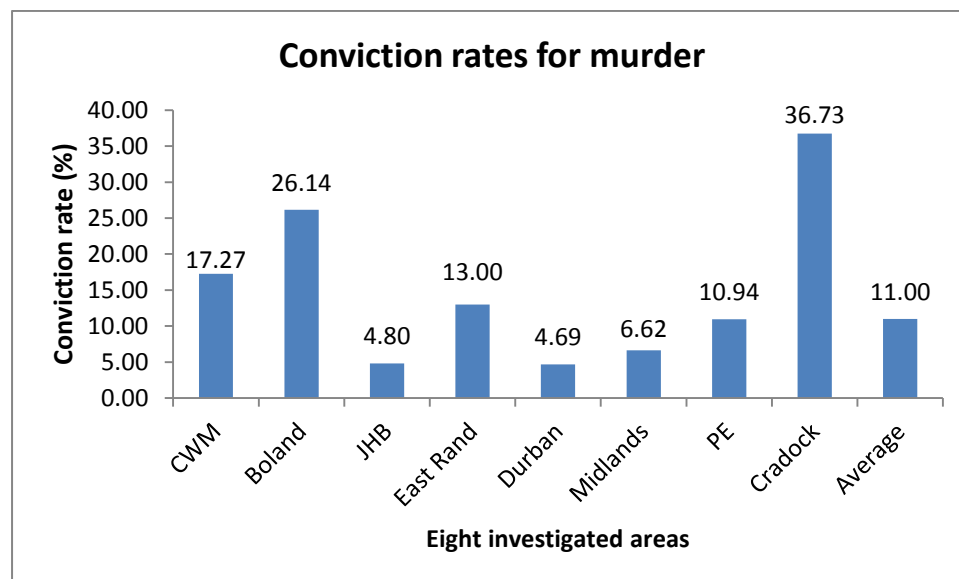


Figure 3-4: Conviction rates for murder in the eight areas in South Africa

These rates are for cases between 1 January 1997 and April 1998. Adapted from the South African Law Commission, (n.d.)

For every 100 violent crimes (murder, rape and aggravated robbery) reported in South Africa, only six are convicted after two years. Moreover, most cases (three quarters) do not even make it to court after two years.¹⁶

Schönteich (1999) conducted a study comparing the CJS outcomes in 1949 to that of 1998 and found that during those five decades there has been a consistent high in the proportion of cases resulting in a conviction (at between 71% and 81%) with respect to the number of cases prosecuted. Seeing that the prosecution decides which cases have a high possibility of leading to a conviction, this is an expected finding. The minority of cases actually end up going to the prosecution service. The chance of a case ending up with the prosecution service also depends on the type of crime. In cases where the victim and perpetrators knew each other, or cases where there were eyewitnesses with knowledge of the perpetrators identity, the probability of the case going to the prosecution service is higher. This probability is lowered in cases where the perpetrators' identity is not known to the victims. In 1998, only 46% of reported murder cases went to the prosecution service and this percentage was even lower for other types of crime.¹⁷

The prosecution service does show considerable success, however there has been a decrease in the number of cases taken on by the service between 1985/1986 and 1995/1996. Between these years there was a 39% decrease in the number of prosecutions and a 42% decrease in the number of convictions.¹⁷

A study was also conducted on rape cases that were closed in Gauteng in 2003. Thirty random dockets were selected at each police station, allowing for 2068 cases to be included in the study. Of these cases 45% were disposed of by the police and 55% by the courts. Of the cases closed by the police, 52% were because the perpetrator was untraceable or unidentified. In the courts, 16% of cases ended in a *nolle prosequi*, 20% were withdrawn and 2% were struck from the court roll. (Vetten et al. 2008) Forty-four per cent of cases were withdrawn by the police and 52% were closed because the perpetrator was untraceable.¹⁸ Of the cases that made it to court, acquittals accounted for 53% and 36% ended in a guilty verdict. Out of all the cases that were reported to the police, there was a conviction in only 6%.¹⁸

The present study also aims to discuss the concept of investigative outcomes and might give insight into the impact of the CJS on FADs. In 2004 Dr Liebenberg from the Division of Forensic Medicine and Toxicology at the University of Cape Town (UCT) completed her Masters of Medicine in Forensic Pathology with a dissertation entitled: "Firearm Fatalities Examined at Salt River Medico-Legal Laboratory (SRMLL) in 1999 and Their Investigative Outcome by 2004". This study was only published as a dissertation by UCT and the data gathered forms part of this paper. The objectives were to construct a victimological profile of FADs in the CWM (roughly half of Cape Town) and also to determine the status of the investigation of these cases by 2004, including the conviction rate. The investigative outcomes were obtained on a case-by-case basis from the SAPS.¹⁹ To try and establish whether any impact of the FCA can be seen in investigative outcomes, it was decided to conduct a follow-up study entitled: "Firearm Fatalities Examined at Salt River Medico-Legal Laboratory in 2009 and Their Investigative Outcome by 2014". This paper focuses on the comparison between the investigative outcomes of the two studies (hereafter termed the 1999 and 2009 studies)

Aims and objectives

This study aims to compare conviction rates of the investigative outcomes of FAD cases from 1999 and 2009, five years after the death. This will be done to explore the effectiveness of the CJS in one area, namely the judicial and investigative processes.

The objectives are to:

- Compare the frequencies of FAD cases from 1999 and 2009
- Compare the percentage of cases ending with certain investigative outcomes from 1999 and 2009
- To determine whether any differences seen are statistically significant
- To make a conclusion regarding whether there were improvements in the judicial processes for FADs between 1999 and 2009

Methodology

Data collection

Figure 3-5 illustrates the different investigative outcomes that were used, there are 11 different outcomes.

The data for the 1999 FADs were obtained from the dissertation by Liebenberg (2004), as published by the UCT Health Science Library. Initially these results were obtained by selecting all the FADs that were seen at the SRMLL. The Division of Forensic Medicine and Toxicology at UCT keeps a database of all cases that had undergone post mortem examinations at SRMLL and hard copies of the records are also archived. For the 2009 FAD cases, the first step of data collection was to filter all FADs from the database. The crucial information from those cases was collected. To make sure that no case was missed all the filed post-mortem records were reviewed to pick up any FAD cases that may not have been entered as FADs on the Digital Office Autopsies database. These records were also used to obtain information not in the database, such as the police Crime Administration System (CAS) number. Some of the most important pieces of information collected were the manner of death; homicide, suicide or other (accident, natural or undetermined).

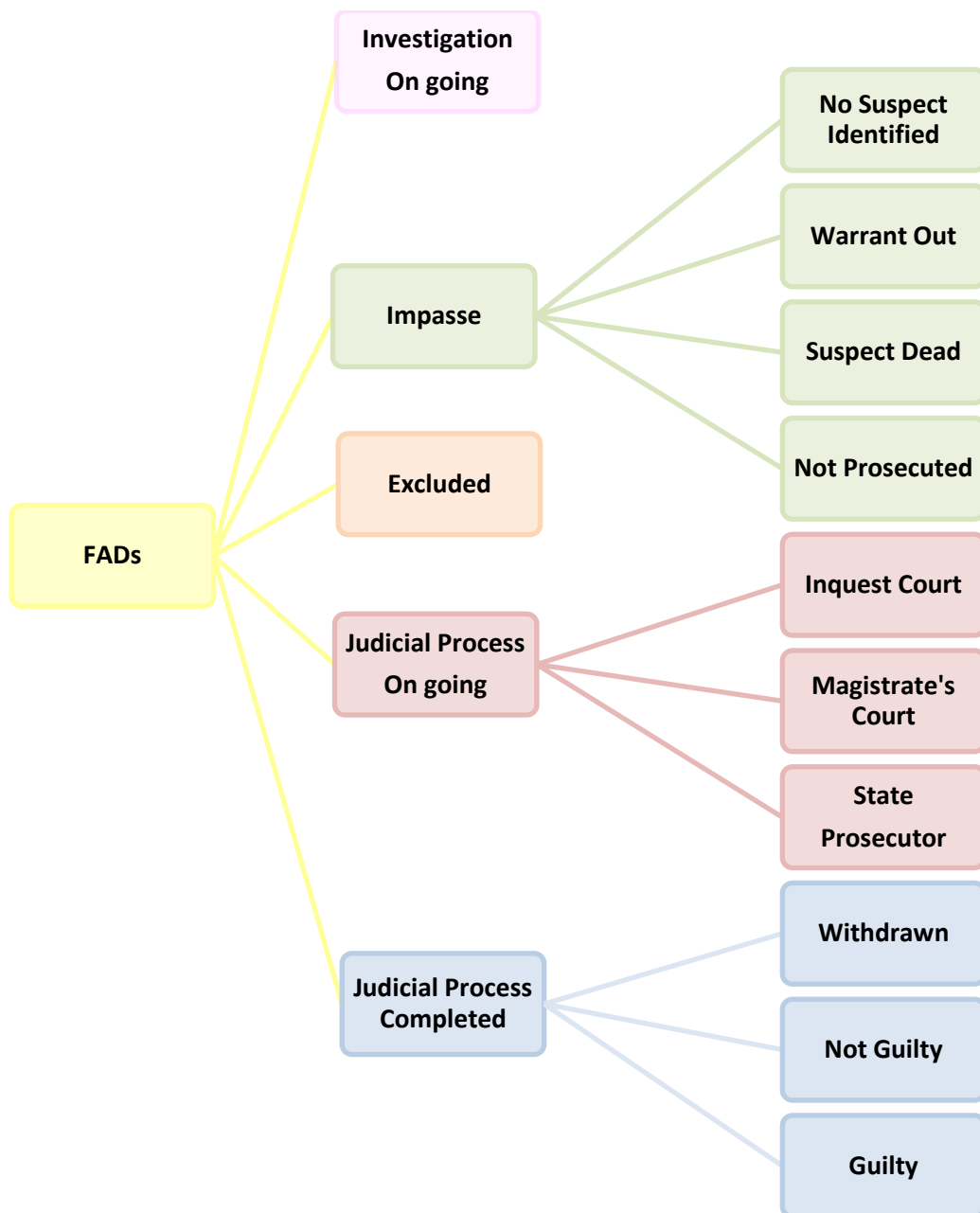


Figure 3-5: The different investigative outcomes originally used for 1999 FADs by Liebenberg (2004)

Information that was collected from the post mortem records to assist in tracing the sample at the SAPS was:

- The date of death
- The mortuary death registration number or WC11 number
- The police station responsible for the docket
- The docket/CAS number

This information was put into a Microsoft Excel spread sheet, along with the various investigative outcomes and given to a liaison officer. This liaison officer serves as an intermediary between Woodstock SAPS and SRMLL. He then used this information to trace the case on the SAPS database or CAS and thus the outcome of the case by 2014 and completed the spread sheet.

Below is a list of all the options for the investigative outcomes in the spread sheet.

- The manner of death/case type as documented by the SAPS:
 - Homicide
 - Suicide
 - Self-defence
 - Accidental
 - Occupational
 - Inquest
 - Natural
- Still being investigated (with the investigating officer)
- Impasse or “nolle prosequi” or no prosecution:
 - Filed – the case is closed, but the reason therefore is not available
 - Undetected – a suspect could not be traced or was not prosecuted
 - No suspect has been identified by the police investigation
 - A warrant for arrest of a suspect is out, but the suspect cannot be traced
 - Not Prosecuted – there was a suspect but the court decided not to prosecute
 - Suspect Dead – a suspect was identified, but he/she passed away in the meantime
- The case is currently in the judicial process:
 - It is in the Magistrate’s court
 - It is in the Inquest court
 - It is with a State Prosecutor
- The case completed the judicial process
 - It was withdrawn in court
 - A suspect was found guilty or convicted
 - A suspect was acquitted or found not guilty
- The date of the outcome reached, for example if a suspect was found guilty, on which date was the verdict established
- Other – any other comments, for example how many suspects and the sentencing outcome

The data was checked to make sure that each case only had one outcome. An additional 'outcome' was added which was where no information was available for the cases and had to be excluded. The data was collected in June 2015; however the aim of the project was to look at the outcomes by 2014. Outcomes that occurred in 2015 were ignored and only the status quo by 31 December 2014 was recorded in the data collection.

Statistical analysis

Tables were created with the totals for each category or outcome for both the victimological and investigative outcome data sets. These were then used to create tables and figures for descriptive and comparative purposes. The data was also statistically analysed using the STATA statistical package. For the comparisons between 2009 and 1999 data, the two sample test of proportions was used; in STATA it is the 'prtesti' function, which is the test for two proportions. The significance level was taken as 0.05 ($p < 0.05$ or $z < 0.05$).

For the comparison between categories or outcomes, a statistical test called 'chitesti' was used. This test was created by Nicholas J. Cox of the University of Durham, U.K. It is a version of a chi-squared test, called the Pearson Goodness of fit test, where the expected frequencies for the different categories are all made equal. This was applied when looking for statistically significant differences within the different categories for each year.

When determining whether a statistical significant difference exists between the categories of cases that were still in the judicial process, the exact test had to be used, as the Pearson Goodness of test was not appropriate, seeing that the expected frequencies were less than five.

The population sizes for each precinct were obtained from the 'Crime Map' of the Institute for Security Studies (ISS), where one can select a precinct and determine the population size for that precinct. The population sizes are based on 2011 census data and this is the only known source of such information at precinct level.²⁰

Results

In 1999 there were 532 firearm death cases and in 2009 there were 281 cases. Relative to the total number of deaths at SRMLL (3 146 in 1999 and 2 905 in 2009), there is a statistical significant difference between 1999 and 2009. Of the 532 cases in 1999, five originally came from police precincts outside the CWM and were excluded from the investigative outcome analysis. Because 2009 had so much fewer cases, the number of FADs from 1999 until 2015 was also looked at to see if a trend exists or whether 2009 had particularly few cases. Figure 3-6 indicates the number of FADs from 1999 until 2015.

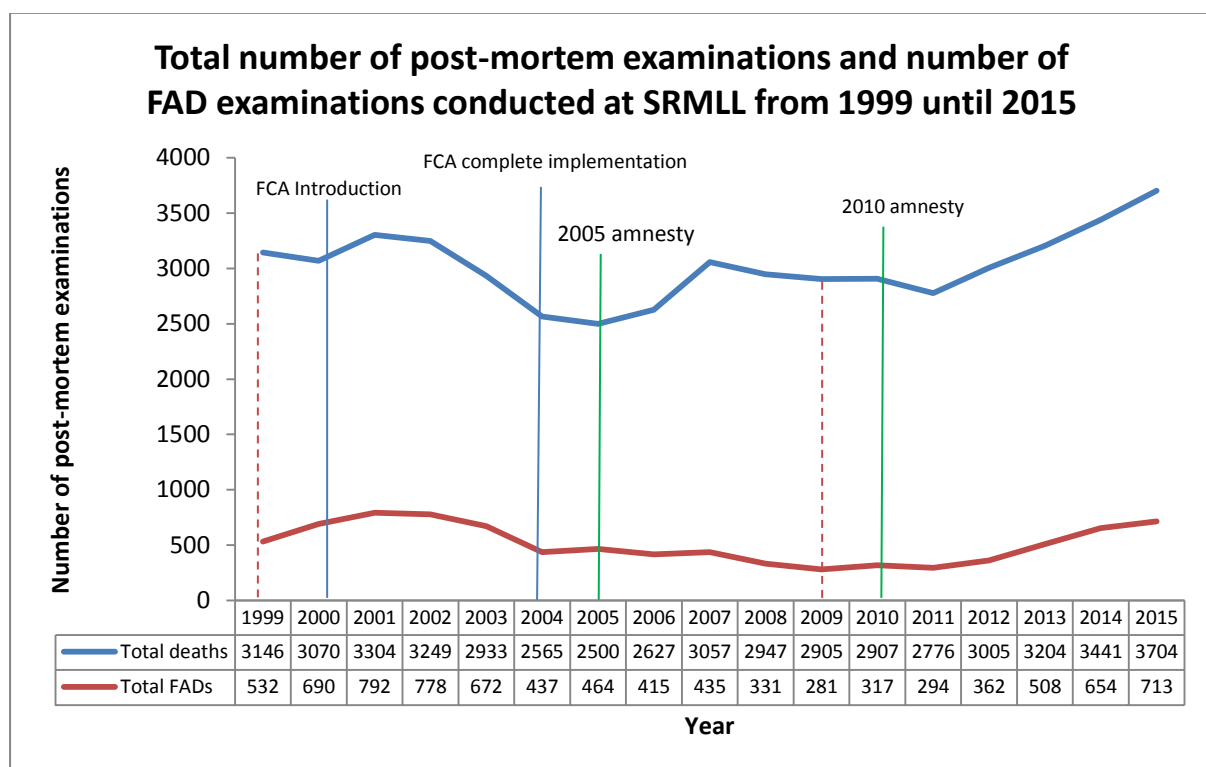


Figure 3-6: Graph representing the annual SMRLL intake and number of FAD cases for 1999 until 2015.

The red dotted lines indicate the two years of interest for this study. The blue lines indicate the years when the FCA was introduced (2000) and the year the FCA was completely implemented. The green lines indicate the amnesty periods (2005 and 2010).

Manner of death

For the manner of death, it was agreed to use the information obtained from the post-mortem records. There are quite a few discrepancies between what the manner of death as recorded by SAPS versus the mortuary document information (as stated by the forensic pathologist). The post mortem records limited it to three different manners of death being homicide, suicide and other. The SAPS data yielded many different manners and some of those would still fit in one of the three post-mortem manners of death, for example a homicide case can be recorded as an inquest by the

police, because it is not very clear who should be held responsible. A suicide can also be called an inquest to allow further investigation of the death. In the 1999 data the manner of death obtained from the post-mortem records were used, thus it only made sense to also do so for the 2009 cases. Figure 3-7 illustrates the percentage of FADs by manner of death.

In 2009 there were two cases where the manner of death was classified as 'other'. One was an accident where the victim shot himself while cleaning a firearm, and according to the SAPS records it was a suicide and the docket was filed. The second case was classified as other because the cause of death was undetermined when an old bullet was found. It is not a FAD per se and could have been omitted from the analysis, but it was kept because the cause of death and the manner of death could not be determined. SAPS documented this case as a natural death and the docket was filed.

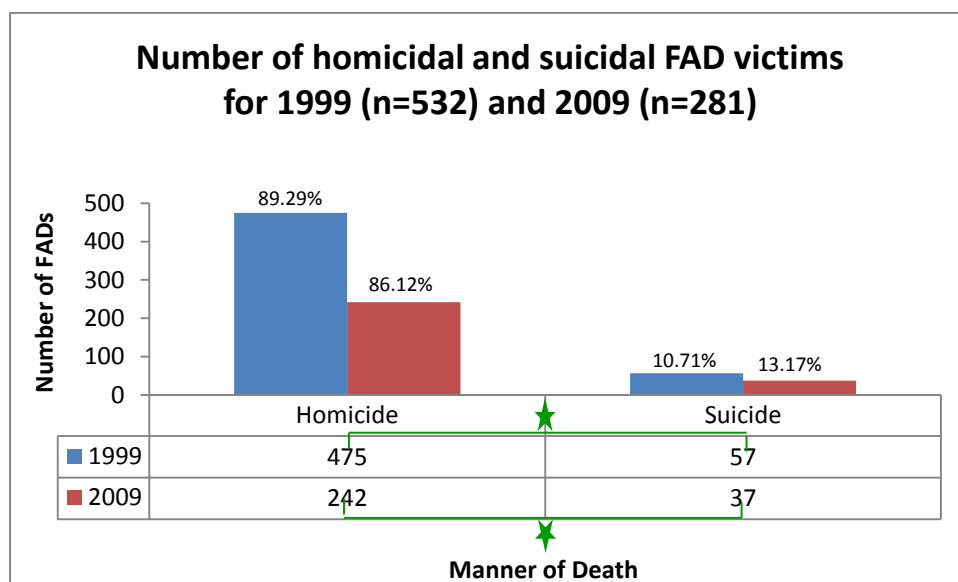


Figure 3-7: A graphic representation of the number of homicidal and suicidal FADs in 1999 and 2009.

The bars represent the number of FAD's, the number above the bars represent the percentage of FADs in that category. There is no significant difference between the percentage homicidal and suicidal FADs between 1999 and 2009. There was however a significant difference between the percentage of homicides vs. suicides for 1999 and 2009. This is represented by the green lines and stars in the graph.

Figure 3-8 is a plot of the total number of FADs seen at SRMLL between 1999 and 2015, as well as a breakdown of the FADs according to manner of death.

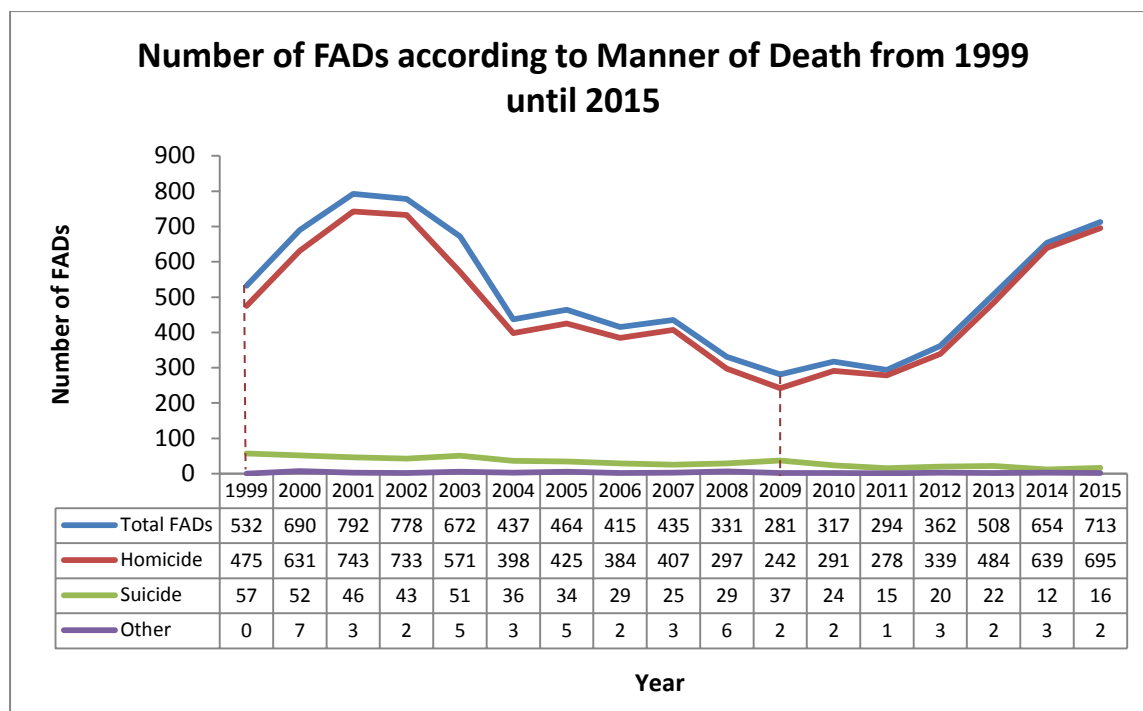


Figure 3-8: The number of FADs examined at SRMLL between 1999 and 2015, by manner of death.
The dotted lines indicate the two years of interest to this study.

Investigative outcomes

In 1999 there were originally 11 different outcomes and in 2009 there were 13 different outcomes, with the addition of the outcomes 'filed' and 'excluded'. For comparative purposes these two categories were included in the analyses of 1999 data, and the number of cases with that outcome made zero. The outcome was determined five years after the case was opened, i.e. in 2004 for the 1999 cases and 2014 for the 2009 cases. Five of the cases from 1999 were removed from the analysis as they fell outside the geographical jurisdiction of the CWM SAPS, but the post-mortem examination was conducted at SRMLL for various reasons. One of the investigative outcomes is not a true outcome, but included for statistical purposes. This is the outcome of exclusion and consists of cases for which information regarding the investigative outcomes could not be obtained. This can be an indication of the data collection process and significantly differs between the two years, with 1999 having 12.90% of cases excluded and 2009 having 7.83% excluded.

The investigative outcomes for 1999 and 2009 are represented in flow-charts, Figures 3-9 and 3-10. These charts indicate the percentages of the FAD cases for each investigative outcome for 1999 (n=527) and 2009 (n=281).

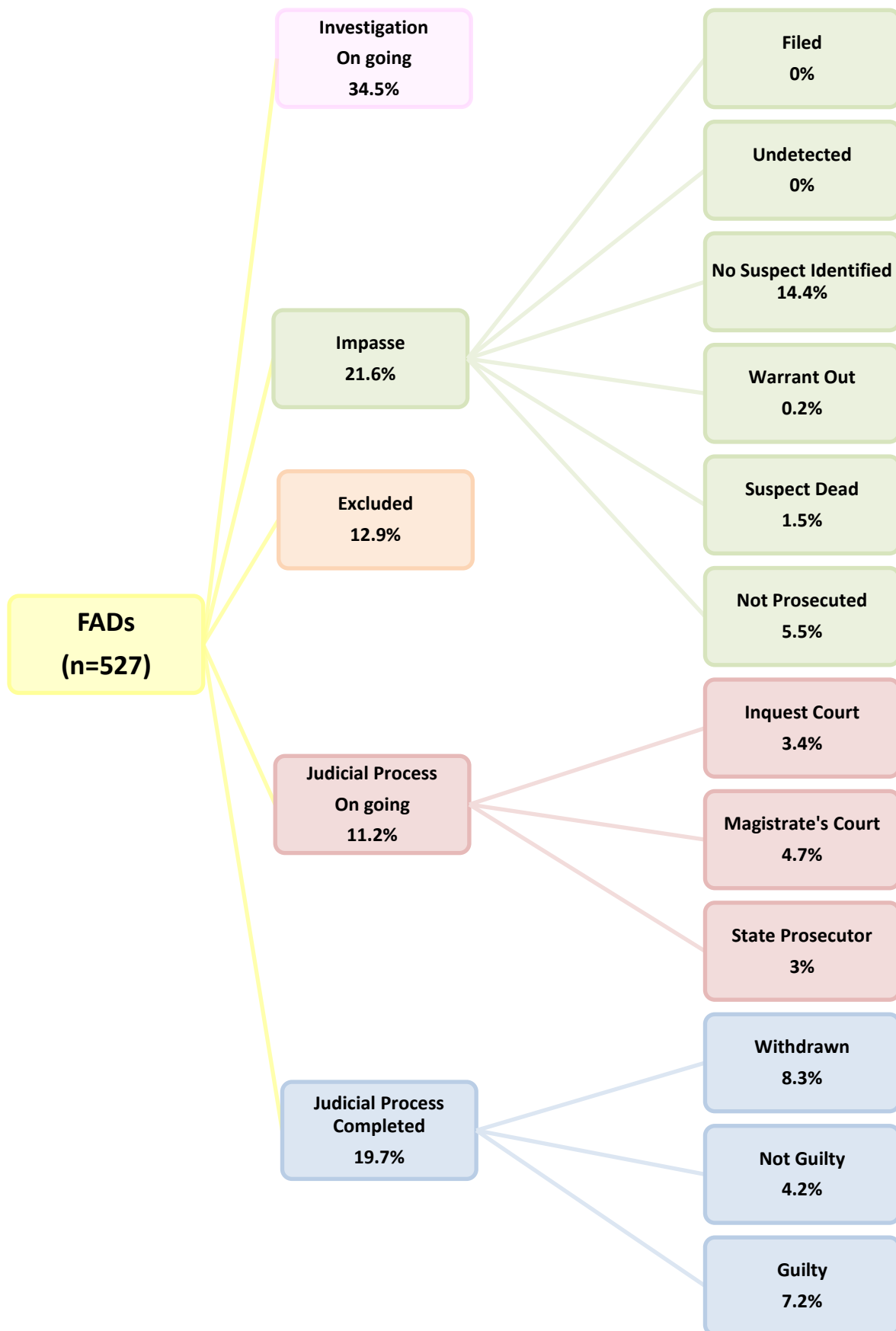


Figure 3-9: Investigative outcomes for FAD cases from 1999 by 2004.
The outcomes 'filed' and 'excluded' were included for comparative purposes.



Figure 3-10: Investigative outcomes for FAD cases from 2009 by 2014

Depicted in Figure 3-11 is the percentage of FADs for 1999 and 2009 that were excluded, are still being investigated, reached an impasse, are still in the judicial process or have completed the judicial process.

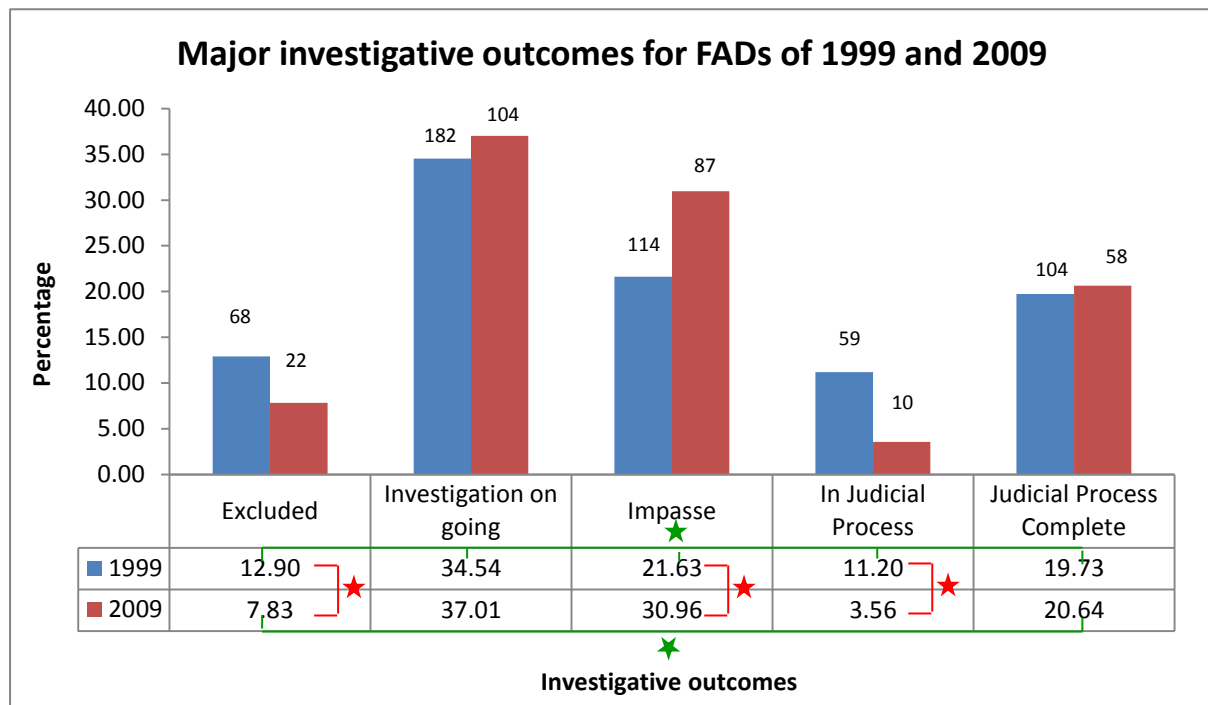


Figure 3-11: Investigative outcomes for FADs from 1999 by 2004 and 2009 by 2014.

The bars represent the percentage of FADs in that category whereas the numbers above the bars represent the actual number of FADs in that category. Significant differences between 1999 and 2009 are represented by the red lines and stars in the graph. There is also a significant difference between the categories (or outcomes) for each of the two years, indicated with the green lines and stars.

Figure 3-11 indicates the broader categories of outcomes, whereas Figure 3-12 shows the number of FADs and percentages of FADs for each of the 14 outcomes.

It is interesting to note that one individual (an assassin) was convicted for 11 of the FADs of 1999, and upon removal of these 11 cases from the analysis, the conviction rate of other perpetrators is only 5.2% (n=516).

Investigative outcomes for FADs of 1999 and 2009

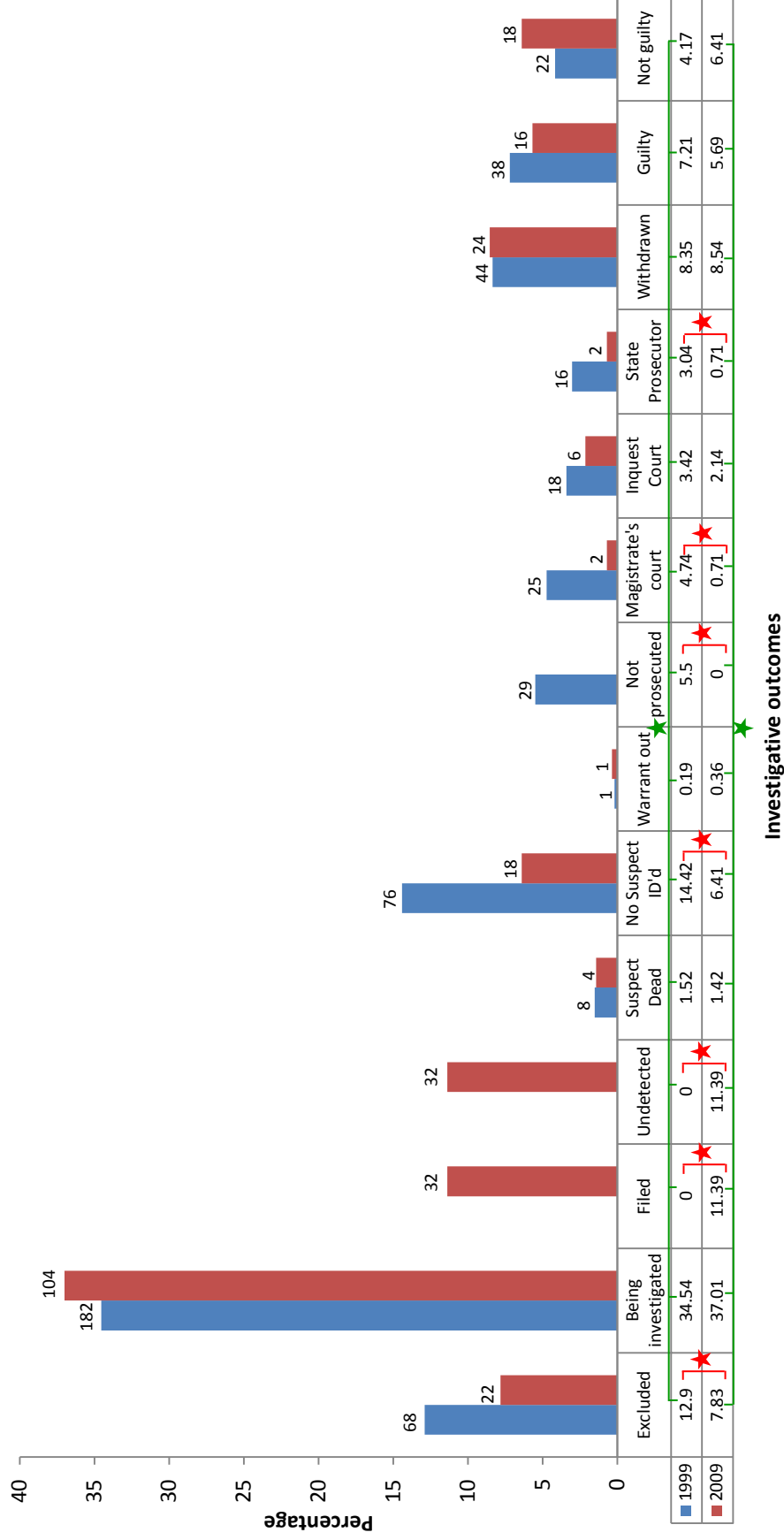


Figure 3-12: Investigative outcome comparison between and within 1999 and 2009.

The bars represent the percentage of FADs in that category whereas the numbers above the bars represent the actual number of FADs in that category. Significant differences between 1999 and 2009 are represented by the red lines and stars in the graph. There is also a significant difference between the categories (or outcomes) for each of the two years, indicated with the green lines and stars.

Depicted in Table 3-6 is a more detailed breakdown of the cases that ended in impasses showing the percentages of FADs relative to the total number of cases (527 and 281) as well as with respect to the number of impasse cases (114 and 87).

Table 3-6: A tabulation of the different impasse outcomes for 1999 and 2009.

Impasses	1999			2009		
	Number	% of impasses (n=114)	% of sample (n=527)	Number	% of impasses (n=87)	% of sample (n=281)
Filed	0	★	0.00	32	★	11.39
Undetected	0	★	0.00	32	★	11.39
Suspect dead	8	-	7.02	4	-	1.42
No suspect identified	76	★	66.67	18	★	6.41
Warrant out, suspect not found	1	-	0.88	1	-	0.36
Suspect not prosecuted	29	★	25.44	0	★	0.00
TOTAL	114	★	100.00	87	★	30.96

Two percentages are given for each year, one being respective to the entire sample (527 for 1999 and 281 for 2009), and the other being respective to the number of impasses (114 for 1999 and 87 for 2009). There are statistically significant differences between the outcomes for the two years, indicated with the red stars next to the number of FADs. There are also significant differences between the different investigative outcomes for each of the two years, indicated by the green lines and stars.

Table 3-7 is a detailed breakdown of the FADs that were still in the judicial process five years after the death (2004 and 2014 respectively). The percentages are given relative to the total number of FADs (527 and 281) as well as relative to the number of cases in the judicial process (59 and 10).

Table 3-7: Outcomes of 1999 and 2009 FADs, where cases were still in the judicial process

In judicial process	1999			2009		
	Number	% judicial on going (n=59)	% of sample (n=527)	Number	% judicial on going (n=10)	% of sample (n=281)
Magistrate's court	25 ★	42.37	4.74	2 ★	20.00	0.71
Inquest court	18	30.51	3.42	6	60.00	2.14
State prosecutor	16 ★	27.12	3.04	2 ★	20.00	0.71
TOTAL	59 ★	100.00	11.20	10 ★	100.00	3.56

Two percentages are given for each year, one being respective to the entire sample (527 for 1999 and 281 for 2009), and the other being respective to the number of cases still in the judicial process (59 for 1999 and 10 for 2009). There are statistically significant differences between the outcomes for the two years, indicated with the red stars next to the number of FADs. There were no significant differences between the different investigative outcomes for each of the two years.

Table 3-8 is a detailed breakdown of all cases that completed the judicial process. The percentages are given relative to the total number of FADs (527 and 281) as well as relative to the number of cases that completed the judicial process (104 and 58). It is interesting to note that even though there was a significant decrease in the number of overall cases between 1999 and 2009, reducing the case load of the judicial process, there is no improvement in the percentage of cases that make it through court, neither is there in the percentage convictions. Significant differences were seen between the years, however no significant differences were noted between the different categories of the two years.

Table 3-8: Different outcomes of 1999 and 2009 where cases had completed the judicial process.

Judicial process complete	1999 (all cases)			1999 (11 cases of assassin removed)			2009		
	Number	% Judicial complete (n=104)	% of sample (n=527)	Number	% Judicial complete (n=93)	% of sample (n=516)	Number	% Judicial complete (n=58)	% of sample (n=281)
Withdrawn	44	42.31	8.35	44	47.31	8.53	24	41.38	8.54
Guilty	38	36.54	7.21	27	29.03	5.23	16	27.59	5.69
Not guilty	22	21.15	4.17	22	23.66	4.26	18	31.03	6.41
TOTAL	104	100.00	19.73	93	100.00	18.02	58	100.00	20.64

Two percentages are given for each year, one being respective to the entire sample (527 for 1999 and 281 for 2009), and the other being respective to the number of cases that completed the judicial process (104 for 1999 and 58 for 2009). There were no statistically significant differences between the outcomes for the two years. There were significant differences between the different investigative outcomes for each of the two years which is indicated by the green lines and star.

Police stations or precincts

Table 3-9 summarises the conviction rate for the police stations in the CWM which had FADs where the post-mortem examination was performed at SRMLL. Information on the number of cases and their outcomes were however only available for the 2009 data. It is important to note that Woodstock might display some skewing purely because Groote Schuur Hospital (GSH) is in Woodstock SAPS jurisdiction. GSH is a tertiary referral hospital often treating Firearm victims before they pass away. When a FAD victim dies in GSH, the case is very often transferred to Woodstock SAPS. It is also important to note that 19 of the 22 cases that had to be excluded were cases supposedly from Woodstock SAPS and all of the victims succumbed in hospital. Of the three other cases that were excluded, one other victim died in hospital and one in an ambulance. The last had a discrepancy between two large police stations (Nyanga and Milnerton).

Table 3-9: Conviction rates for 2009 FAD cases at the different police stations in the CWM

Police station	Number of cases		Guilty	
	Number	Percentage of total (n=281)	Number	Percentage
Athlone	6	2.14	1	16.67
Atlantis	15	5.34	1	6.67
Bishop Lavis	1	0.36	1	100.00
Camps Bay	1	0.36	0	0.00
Claremont	1	0.36	0	0.00
Cape Town Central	3	1.07	0	0.00
Diep River	1	0.36	0	0.00
Fish Hoek	1	0.36	0	0.00
Grassy Park	3	1.07	0	0.00
Gugulethu	35	12.46	5	14.29
Hout Bay	1	0.36	1	100.00
Kensington	3	1.07	0	0.00
Khayelitsha	3	1.07	0	0.00
Kirstenhof	4	1.42	1	25.00
Lansdowne	4	1.42	0	0.00
Langa	6	2.14	1	16.67
Lingeletu-West	1	0.36	0	0.00
Maitland	1	0.36	0	0.00
Manenberg	6	2.14	0	0.00
Milnerton	18	6.41	3	16.67
Mitchells Plain	19	6.76	0	0.00
Muizenberg	6	2.14	0	0.00
Nyanga	62	22.06	1	1.61
Ocean View	2	0.71	0	0.00
Philadelphia	1	0.36	0	0.00
Phillipi	8	2.85	0	0.00
Phillipi-East	20	7.12	1	5.00
Pinelands	2	0.71	0	0.00
Sea Point	4	1.42	0	0.00
Simon's Town	1	0.36	0	0.00
Steenberg	1	0.36	0	0.00
Strandfontein	1	0.36	0	0.00
Table view	8	2.85	0	0.00
Woodstock	24	8.54	0	0.00
Uncertain	8	2.85	0	0.00

The areas in bold, indicate areas where the number of FADs were highest

In Table 3-9 the areas in bold are the precincts with the highest number of FADs, it is interesting to note that Milnerton and Mitchells Plain had similar number of FADs, however Mitchells Plain had a conviction rate of zero, and Milnerton had a fairly high conviction rate of 16.67%. Gugulethu is the precinct with the second highest number of FADs, yet there is quite a high conviction rate of 14.29%.

Table 3-10: Comparison of conviction rates of 1999 and 2009 FADs to Brown *et al.* (2015).

Police station	Total number of cases			Conviction rate			Number of Convictions		
	1999 FADs	2009 FADs	Brown <i>et al.</i> (2015)	1999 FADs	2009 FADs	Brown <i>et al.</i> (2015)	1999 FADs	2009 FADs	Brown <i>et al.</i> (2015)
All	527	281	300	7.2% ★	5.7% ★	18.7% ★	38	16	56
Mitchells Plain	98	19	75	Unknown	0	5.3%	-	0	4
Nyanga	67	62	75	Unknown	1.60 %	6.7%	-	1	5

For Brown *et al.* (2015) the conviction rate (percentage) was converted to number of convictions. The red stars indicate where there are significant difference between the conviction rate of this study (1999 and 2009 FADs) and that of Brown *et al.* (2015)

Table 3-10 compares the conviction rates of police stations that were studied by Brown *et al.* (2015) with the stations included in this study. There were two precincts that were in this study as well as Brown *et al.* (2015), these being Mitchells Plain and Nyanga. There was only a significant difference in the overall conviction rate found by Brown *et al.* (2015) and the 1999 and 2009 FADs.

If a conviction rate at the precinct level is going to have any meaning, it is important to consider the number of investigating officers at that precinct and also the population size. Table 3-11 and 3-12 summarises the number of investigating officers (IO's), the number of IO's per 100 000, the number of FADs, the number of FADs per 100 000 as well as the number of FADs per IO. In 2009 there were eight cases where the identity of the police station was unknown or uncertain (not indicated in Tables 3-11 and 3-12); these are mainly cases where no information was available and two cases where the police station given is Observatory, which does not exist. It is likely that these cases were cases from Woodstock, but they were included as uncertain. Statistically significant differences are indicated with stars.

In 1999 data was only collected on precincts included in that study and not precincts where no FADs were investigated. In some instances there is also no 1999 data for a precinct, because that police station might not have existed, for example:

- In 1999 the police station called Lingeletu-West did not exist
- Simon's Town and Philadelphia did not have any FADs in 1999

Therefore a few SAPS precincts' IO deployment was not collected in 1999 and could not be compared to that of 2009. For these cases the IO deployment and population size is given as 'unknown'. For 2009 and 2015 information for all the police stations included in both the 1999 and 2009 studies could be collected from the Human Resource Department at Caledon Police Station, through personal communication.²¹

Some of the results that had surprisingly low or high rates were highlighted. Cape Town Harbour, formally known as Table Bay Harbour, has a very high police deployment rate, this is skewed by the fact that even though it is a busy area, the population residing there is very small. In 1999 the FAD case-load was very high in Gugulethu and Nyanga and at 2.90 and 2.16 FADs per IO respectively, in 2009, Gugulethu still had quite a large FAD case-load at 0.69 FADs per IO, but Nyanga is now the police station with the largest FAD case-load at 0.95. Between 1999 and 2009 the overall FAD case-loads decreased significantly, which is why there is such a large discrepancy between the number of FADs per IO in 1999 and 2009. In 1999 Claremont was the precinct with the lightest FAD case-load with 0.11 FADs per IO, and in 2009 at 0.03 FADs per IO, it is still the area (along with Bishop Lavis, Cape Town and Strandfontein) with the lowest FAD case-load (excluding the areas where there weren't any FADs). This is due to an overrepresentation of police personnel in that precinct.

Table 3-11: IO capacity in 1999 and 2009.

Police Station	1999						2009					
	Population ²⁰	IO's ²¹	IO/100 000	FADs	FAD/100 000	FADs/IO	Population ²⁰	IO's ²¹	IO /100 000	FAD	FAD/100 000	FAD/IO
Athlone	66883	19	28 ★	25	37 ★	1.32	63250	39	62 ★	6	9 ★	0.15
Atlantis	67658	28	41	15	22	0.54	79501	31	39	15	19	0.48
Bishop Lavis	99081	24	24	6	6 ★	0.25	105053	30	29	1	1 ★	0.03
Camps Bay	5329	4	75 ★	1	19	0.25	5539	12	217 ★	1	18	0.08
Claremont	32763	19	58 ★	2	6	0.11	30882	37	120 ★	1	3	0.03
Cape Town Harbour	639	7	1095	1	156	0.14	0	9	n/a	0	n/a	n/a
Cape Town Central	38548	54	140 ★	13	34 ★	0.24	35013	95	271 ★	3	9 ★	0.03
Diep River	32259	12	37	2	6	0.17	38650	17	44	1	3	0.06
Fish Hoek	19991	8	40	6	30 ★	0.75	20044	9	45	1	5 ★	0.11
Grassy Park	95992	21	22 ★	22	23 ★	1.05	88612	37	42 ★	3	3 ★	0.08
Gugulethu	118375	29	24 ★	84	71 ★	2.90	124015	51	41 ★	35	28 ★	0.69
Hout Bay	20364	8	39	3	15 ★	0.38	33419	12	36	1	3 ★	0.08
Kensington	27385	8	29	9	33 ★	1.13	25591	13	51	3	12 ★	0.23
Kirstenhof	27403	11	40	2	7	0.18	30278	16	53	4	13	0.25
Khayelitsha	349227	47	13 ★	19	5	0.40	154451	55	36 ★	3	2	0.05
Langa	48793	15	31 ★	22	45 ★	1.47	47503	30	63 ★	6	13 ★	0.20
Lansdowne	49839	17	34 ★	5	10	0.29	48480	24	50 ★	4	8	0.17
Lingulethu-West	Unknown	Unknown	Unknown	-	Unknown	Unknown	64960	25	38	1	2	0.04
Maitland	14003	12	86 ★	7	50 ★	0.58	19523	9	46 ★	1	5 ★	0.11
Manenberg	81656	23	28 ★	28	34 ★	1.22	85285	39	46 ★	6	7 ★	0.15
Melkbos	6827	4	59 ★	4	59 ★	1.00	12924	4	31 ★	0	0 ★	0.00
Milnerton	36536	15	41	13	36 ★	0.87	86316	41	47	18	21 ★	0.44
Mitchells Plain	278360	74	27 ★	98	35 ★	1.32	280789	139	50 ★	19	7 ★	0.14
Mowbray	12241	12	98 ★	12	98 ★	1.00	20698	9	43 ★	0	0 ★	0.00
Muizenberg	28486	11	39	6	21 ★	0.55	59025	23	39	6	10 ★	0.26
Nyanga	120703	31	26	67	56 ★	2.16	205142	65	32	62	30 ★	0.95

The population size was used to calculate the number of IO's per 100 000 and FADs per 100 000. Significant differences between IO capacity for 1999 and 2009 are indicated with the red stars. The significant differences between the number of FADs per 100 000 in 1999 and 2009 are indicated with blue stars.

Table 3-12: A continuation of Table 11, IO capacity in 1999 and 2009.

Police station	1999						2009					
	Population ²⁰	IO's ²¹	IO/100 000	FADs	FAD/100 000	FADs/IO	Population ²⁰	IO's ²¹	IO /100 000	FAD	FAD/100 000	FAD/IO
Ocean View	21497	6	28	3	14 ★	0.50	40518	10	25	2	5 ★	0.20
Philadelphia	Unknown	Unknown	Unknown	0	Unknown	Unknown	7308	3	41	1	14	0.33
Phillipi	47755	15	31 ★	19	40 ★	1.27	53911	31	58 ★	8	15 ★	0.26
Phillipi-East	Unknown	Unknown	Unknown	-	Unknown	Unknown	53465	29	54	20	37	0.69
Pinelands	18836	9	48 ★	7	37 ★	0.78	20698	15	72 ★	2	10 ★	0.13
Rondebosch	19244	12	62 ★	2	10 ★	0.17	14760	14	95 ★	0	0 ★	0.00
Sea Point	2441	20	82 ★	7	29 ★	0.35	24772	30	121 ★	4	16 ★	0.13
Simon's Town	Unknown	Unknown	Unknown	-	Unknown	Unknown	14364	4	28	1	7	0.25
Steenberg	68068	17	25 ★	8	12 ★	0.47	61713	29	47 ★	1	2 ★	0.03
Strandfontein	21200	4	19 ★	2	9	0.50	28256	9	32 ★	1	4	0.11
Table View	32195	10	31	4	12	0.40	74127	23	31	8	11	0.35
Woodstock	29519	22	75 ★	7	24 ★	0.32	27548	36	131 ★	24	87 ★	0.67
Wynberg	28802	10	35 ★	5	17 ★	0.50	25241	29	115 ★	0	0 ★	0.00

²⁰The population size was used to calculate the number of IO's per 100 000 and FADs per 100 000. Significant differences between IO capacity for 1999 and 2009 are indicated with the red stars. The significant differences between the number of FADs per 100 000 in 1999 and 2009 are indicated with blue stars

Table 3-13 illustrates the employment growth of certain police services between 1 April 2007 until 31 March 2011, as obtained from SAPS annual reports. ^{22, 23, 24, 25}

Table 3-13: Number of SAPS posts filled in three financial years and the increase between them.

Service	1 April 2007 until March 2008	1 April 2008 until 31 March 2009	1 April 2009 until 31 March 2010	1 April 2010 until 31 March 2011	% increase from 1 April 2007 until 31 March 2011
Visible policing	89993	96095	98522	97693	8.56%
Detective Service	30596	30753	33651	37402	22.24%
Crime Intelligence	6806	7142	7542	8723	28.17%
Protection and Security Service	13591	15836	16966	16722	23.04%

^{22, 23, 24, 25}Obtained from SAPS annual reports.

Table 3-14: Number of IO's per police station for 1999, 2009 and 2015.

Police station	1999		2009		2015	
	IO's	IO's per 100 000	IO's	IO's per 100 000	IO's	IO's per 100 000
Athlone	19	28 ★	39	62	35	55
Atlantis	28	41	31	39	34	43
Bishop Lavis	24	24 ★	30	29	44	42
Camps Bay	4	75 ★	12	217 ★	6	108
Claremont	19	58 ★	37	120	43	139
Cape Town Central	54	140 ★	95	271	94	268
Diep River	12	37	17	44	17	44
Fish Hoek	8	40	9	45	9	45
Grassy Park	21	22 * ★	37	42	34	38
Gugulethu	29	24	51	41	45	36
Hout Bay	8	39	12	36	11	33
Kensington	8	29	13	51 ★	8	31
Kirstenhof	11	40	16	53	16	53
Khayelitsha	47	13 ★	55	36	67	43
Langa	15	31 ★	30	63	27	57
Lansdowne	17	34	24	50	22	45
Lingulethu-West	Unknown	Unknown	25	38	27	42
Maitland	12	86	9	46	15	77
Manenberg	23	28 ★	39	46	41	48
Melkbos	4	59 ★	4	31	4	31
Milnerton	15	41 ★	41	47	38	44
Mitchells Plain	74	27	139	50	106	38
Mowbray	12	98 ★	9	43	12	58
Muizenberg	11	39	23	39	23	39
Nyanga	31	26	65	32	56	27
Ocean View	6	28	10	25	10	25
Philadelphia	Unknown	Unknown	3	41 ★	6	82
Phillipi	15	31 * ★	31	58	26	48
Phillipi-East	Unknown	Unknown	29	54	24	45
Pinelands	9	48	15	72	12	58
Rondebosch	12	62 ★	14	95	17	115
Sea Point	20	82	30	121	29	117
Simon's Town	Unknown	Unknown	4	28	3	21
Steenberg	17	25	29	47	28	45
Strandfontein	4	19	9	32	7	25
Table Bay Harbour	7	1095	9	n/a	9	n/a
Table View	10	31	23	31	22	30
Woodstock	22	75 ★	36	131	34	123
Wynberg	10	35 ★	29	115	30	119

The red stars indicate significant differences between 2015 and the two study-years (1999 and 2009). The differences between 1999 and 2009 is indicated in Tables 11 and 12 and not repeated here. The asterisk indicates unidirectional statistical differences. The population size used to calculate the number of IO's per 100 000 is shown in tables 11 and 12 with 2015 having the same population size as 2009.^{20,21}

It is suspected that the increases in IO representation around 2010 were due to preparations for the 2010 FIFA World Cup seeing that in the five years before the 2010 FIFA World Cup SAPS recruited 55 000 new police officers.²⁶ To determine whether there was drastic skewing in the number of IO's in 2009 due to this fact the number of IO's per police station was also obtained for 2015. This can be seen in Table 14, where the number of IO's of 2015 was compared to that of 1999 and 2009. The population sizes used for 2009 and 2015 are the same, as both are based on the 2011 census population estimates and are the only precinct-level statistics available.²⁰ There are not many significant differences between 2009 and 2015, which might indicate that the number of IO's was not too drastically skewed by the 2010 FIFA World Cup and that the increase in police staffing was maintained. Camps Bay did however see significant differences among all three years where there was an overrepresentation of IO's in 2009.

Time lapse

The duration between the occurrence of death and the date the investigative outcome was reached was also calculated. Figure 3-13 illustrates the time lapse (in months since death) of the investigative outcomes for 1999 and 2009. Not indicated in the graph is the duration for the collective categories. The cases that reached an impasse took on average 30.3 months for the 2009 cases, this duration was not available for the 1999 cases. The cases that were still in the judicial process took on average 54.8 months for the 1999 cases and 53.0 months for the 2009 cases. On average the 1999 cases took 42.4 months to complete the judicial process and the 2009 cases took significantly less time at 29.3 months. In 2009 there was also a significant difference in time it took for a case to reach an impasse, to reach the judicial process as well as to complete the judicial process. This also holds true for the 1999 cases that were in the judicial process and those that completed the judicial process. There were also statistically significant differences among the different investigative outcomes in 1999 and 2009 and these are indicated in Table 3-15, where the year indicates that there is a statistical significant difference.

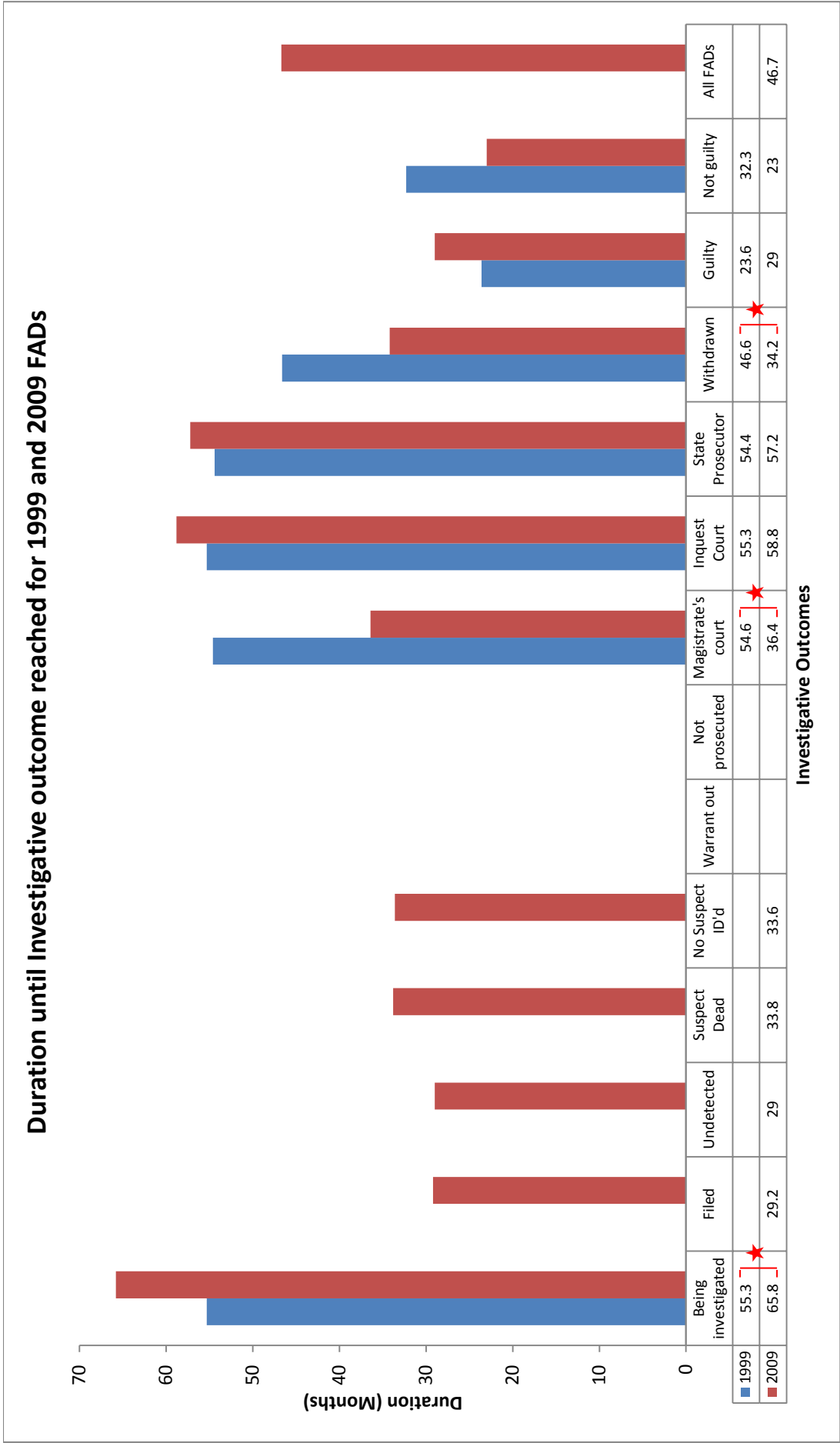


Figure 3-13: Average duration from date of death until a specific outcome was reached for 1999 and 2009.
 There are significant differences between the duration of cases for 1999 and 2009; these are indicated with red lines and stars.

Table 3-15: Significant differences found between the investigative outcomes of 1999 and 2009.

Outcomes	Investigation on-going	Filed	Undetected	Suspect dead	No suspect identified	Warrant out	Not prosecuted	Magistrate's court	Inquest court	State Prosecutor	Withdrawn	Guilty	Not guilty
Investigation on-going	x	2009	2009	2009	2009	2009	x	x	2009*	2009	2009	1999; 2009	1999; 2009
Filed	x	x	x	x	x	x	x	x	2009	2009	x	x	x
Undetected	x	x	x	x	x	x	x	x	2009	2009	x	x	x
Suspect dead	x	x	x	x	x	x	x	x	2009	2009	x	x	2009*
No Suspect Identified	x	x	x	x	x	x	x	x	2009	2009	x	x	2009*
Warrant out	x	x	x	x	x	x	x	x	x	x	x	x	x
Not Prosecuted	x	x	x	x	x	x	x	x	x	x	x	x	x
Magistrate's court	x	x	x	x	x	x	x	x	x	x	x	1999	1999
Inquest court	x	x	x	x	x	x	x	x	x	x	x	1999; 2009	1999; 2009
State Prosecutor	x	x	x	x	x	x	x	x	x	x	x	1999; 2009	1999; 2009
Withdrawn	x	x	x	x	x	x	x	x	2009	2009	x	x	2009*
Guilty	x	x	x	x	x	x	x	x	2009	2009	x	x	x
Not guilty	x	x	x	x	x	x	x	x	x	x	x	x	x

The number in the bloc indicates the year in which the difference was significant. If it has 1999 and 2009, it was significant in both years. A combination of outcomes has only been selected once. The asterisks indicate areas where the statistical significance was only one-sided.

Brown *et al.* (2015) had an overall duration until conviction of 475 days (15.57 months) which is significantly different from that found in 1999 (23.6 months) and 2009 (29 months). Regarding the duration of cases to be withdrawn in court, Brown *et al.* (2015) found that it took 415 days (13.6 months) on average, which differs significantly from that found in 1999 (46.6 months) and 2009 (34.2 months).³

Discussion

The most important finding is probably the significantly lower number of FADs that occurred in 2009 as opposed to 1999. In 2009 there was 47% less FADs than in 1999, in addition, 2009 saw the lowest number of FADs between the years 1999 and 2015. There was a large peak in 2001 at 792 FADs, right after the introduction of the new legislation, the FCA. After 2001 there was a promising decrease in FADs with a massive decrease in 2004, when the FCA was fully implemented. Between 1999 and 2015, the biggest year-by-year decrease in the number of FADs was seen between 2003 and 2004 with a decrease of 5.9%, which is statistically significant. This might suggest that the FCA was effective; nevertheless, this decrease only lasted until about 2012. In 2013, there was an enormous spike, after which the number of FADs kept increasing until 2015 when it reached 713 deaths, almost as high as in 2001. Matzopoulos, *et al.* (2014) cited that from 2001 until 2005 there was a 13.6% decrease in firearm homicides across five South African cities. This study found that between those two years, the CWM had a 42.8% reduction in the absolute number firearm related homicides.¹⁰ There were two amnesty periods, falling within the period of decreased FADs in the CWM.¹³ Interestingly though is that during these years (the 2005 and 2010 amnesty periods) there were slight spikes in the FADs yet again; however these increases are not statistically significant.

Even though the number of deaths due to firearms dropped significantly between 1999 and 2009, it is not the only indicator of a successful CJS. This study uses conviction rate and other investigative outcomes as a measure of the effectiveness of the investigative and judicial processes of the CJS. Investigative outcomes from 1999 cases were compared with those of 2009, which is a decade apart. One of the most remarkable findings is that even though there were almost half as many FAD cases in 2009 as in 1999 there was no improvement in the conviction rate, with 1999 having a conviction rate of 7.2% and 2009 of 5.7%. There were no significant differences between the percentages of cases among the three different outcomes in the category where the judicial process was complete. The percentage of cases that were withdrawn in court was similar in 2009 as in 1999, however the time it took to be withdrawn was significantly less in 2009. There was also no difference in the percentage of acquitted cases, but once again the duration was shorter in 2009, although not statistically significant.

There was a significant difference in the number of cases that had to be excluded in 1999 versus 2009. In 1999 there was more exclusion, suggesting poorer data collection; however in 2009 two extra categories had to be added. The outcomes 'filed' and 'excluded' are broader categories for certain cases that are closed, meaning that there was no more information exactly why a case reached an impasse.

The number of cases that are still being investigated are similar between 1999 and 2009, however the duration differs significantly between the two. For cases still being investigated, the duration should be from the date of death until the date of information collection. This would suggest that there should not be such a big difference between 1999 and 2009. The most reasonable explanation is that cut-off date for the investigative outcome was earlier than 31 December in 2004, as opposed to on 31 December 2014 with the 2009 cases. There is also a significant difference between the percentages of cases where no suspect was identified. This is most likely because of the added categories of 'filed' and 'undetected' which might contain cases where the outcome would have been 'no suspect identified', but it was not recorded during data collection. This is possibly also the reason for the discrepancy between the percentages of cases which were not prosecuted.

In 2009 there were significantly fewer cases that were in the judicial process by 2014, when compared to the percentage of 1999 cases still in the process by 2004. The biggest difference between the two is noted in the total number of cases in the judicial process, as well as the number of cases in the Magistrate's court and with the State Prosecutor. There was also a difference in the duration between the death and the time when the case reached the Magistrate's court. This could be seen as a positive finding when it reaches the court sooner, but as it was still there by 31 December 2014, it means that those cases stay in the court for a prolonged time period.

Out of the 34 police stations there were only 10 that had any guilty verdicts. The highest conviction rates in 2009 were at Bishop Lavis and Hout Bay, where there was one FAD at each and both led to a conviction. Kirstenhof has a conviction rate of 25%, but this is also only due to one case where a suspect was found guilty. There are three police stations with a conviction rate of 16.67% and these are Athlone (one guilty verdict), Langa (also one guilty verdict) and Milnerton with three guilty verdicts. Then there is Gugulethu with five guilty verdicts, leading to a conviction rate of 14.29%. Next in sequence is Atlantis with a conviction rate of 6.67% (one guilty verdict), followed by Phillippi-East with 5% of cases leading to a guilty verdict (one conviction) and lastly Nyanga, also with one

conviction from one guilty verdict. It is interesting to note that Milnerton and Mitchells Plain had similar number of FADs, however Mitchells Plain had a conviction rate of zero, and Milnerton had a fairly high conviction rate of 16.67%.

It was found that the 1999 and 2009 FAD cases had a longer duration until withdrawal or conviction than that stated by Brown *et al.* (2015). The differences between this study and Brown *et al.* (2015) is possibly because of the differences in study design, which does not allow direct comparison. Brown *et al.* (2015) had a long study period, a larger area of coverage and included other FRCs, as opposed to only investigating the FADs, however it is the only study that allows for any comparison. Brown *et al.* (2015) found an overall conviction rate of 18.7% in the WC between 1999 and 2014, which is much higher than the 7.2% in the CWM in 1999 as well as the 5.7% in 2009, which is a statistically significant difference. The study by Brown *et al.* (2015) used 300 dockets of different FRC's between 1999 and 2014. Brown *et al.* (2015) found that Mitchells Plain had a conviction rate of 5.3%, whereas in 2009 in the CWM the conviction rate for Mitchells Plain was zero, however, this is not statistically significant. In Nyanga, Brown *et al.* (2015) found a conviction rate of 6.7%, whereas in 2009 Nyanga had a conviction rate of 1.61%, which once again is not statistically significant. The reason there is no statistical significant difference is likely because there are more cases in the Brown *et al.* (2015) study. There were 75 cases for each of the two police stations and it comprised of all firearm related crimes, not only homicides. There is also no conviction rate breakdown by police station for 1999.

The overall conviction rates of 7.2% and 5.7% are similar to that found by the South African Law Commission (n.d.) of 6%, however, this rate was for all cases of murder (not only FADs), rape and robbery with aggravating circumstances, between 1997 and 1998. This study also found that 75% of the cases never reached the judicial process and 4% of cases were still in the judicial process after approximately two years.

Of the 21% of cases that did complete the judicial process, 10% were withdrawn, 5% of cases had a not-guilty verdict and only 6% of cases ended in a guilty verdict.¹⁶ When only considering the murder cases, which are more appropriate for comparative purposes, 61% of cases did not go to court, 12% were still in court, 8% were withdrawn, in 8% a suspect was found not guilty and in 11% of the cases there was a guilty verdict. When comparing the 11% conviction rate to 1999 and 2009 FAD conviction rates, there is no significant difference, indicating that FAD conviction rates mirror that of

overall murder conviction rates. The percentage of acquittals is also similar between 1999, 2009 and the South African Law Commission (n.d.) studies. The percentage of cases still in the judicial process is also similar, but only for 1999 FADs. The South African Law Commission (n.d.) also looked at the CWM specifically, which is more comparable to the 1999 and 2009 studies. Among the CWM murders, 50.35% had not gone to court, in 19.42% of cases the trial was on going, 4.32% of cases were withdrawn in court, 8.63% were acquitted and only 17.27% were convicted¹⁶, which is significantly more than that found in 1999 and 2009 FAD cases.

Shaw (1997) believes that part of the CJS problem lies with the detective services, where detectives have always been far and few between and experienced detectives have also left the service for the private security sector. There are also very few advantages to becoming a detective. Respectable detectives often work seven days a week, whereas uniform officers work for four days and are then off duty for four days. They have a heavy workload, where one officer can sometimes carry more than 50 dockets simultaneously. Detectives often work without overtime, under poor and dangerous conditions and with minimal training. Only 26% of detectives attended a detective course and only 13% of all detectives have more than six years' experience in their positions. Understaffing is often the largest reason given for poor performance of the CJS, however this does not seem to hold true for this study.²⁷ There were significantly more investigating officers in 2009 as opposed to 1999, at most police stations. It is however, interesting that the police station with the largest number of FADs in 2009 (Nyanga) did not have more IO's than it did in 1999. Five police stations (Camps Bay, Claremont, Khayelitsha, Lansdowne and Strandfontein) had significantly more IO's per 100 000 in 2009 vs. 1999, however there was no significant difference in the number of FADs per 100 000. There were also stations where there were significantly fewer FADs per 100 000, but without any significant changes in the number of IO's per 100 000. These were: Bishop Lavis, Fish Hoek, Hout Bay, Kensington, Milnerton, Muizenberg, Nyanga and Ocean View. This would perhaps suggest that the number of IO's do not influence the number of FADs or vice versa. An area where the number of officers might influence the number of deaths is probably the visible policing unit, as they are more likely to play a role in crime prevention, as opposed to the IO's who are involved in crime solving.

In 1999 the FAD case-load was very high in Gugulethu and Nyanga and in 2009, Gugulethu was the precinct with the second highest number of FADs and FADs per IO (FAD case-load), yet there is quite a high conviction rate of 14.29% suggesting that high FAD case-loads are perhaps not a blanket excuse for poor investigation and conviction.

In 1994 SAPS had 140 000 members and in the following three years this number decreased to about 120 000. During this period the murder rate actually dropped by 10%. Since 1994, the murder rate had decreased from 66.9 per 100 000 to 31.9 per 100 000 in 2011, but it is the only crime category that shows this downward trend. There is no correlation between this trend and police personnel figures. Between 2004/2005 and 2009/2010 police personnel grew by 30%. Between those years residential and business robberies increase by 51% and 295%, total crimes increased by 4% between 2007/2008 and 2009/2010. Fifty-six per cent were working in visible policing by 2012, 19% in detective services.²⁸

According to the SAPS annual human resource management reports, there were large increases in personnel in four different units or departments. In the visible policing unit there was a 5.56% increase, in detective services a 22.24% increase, a 28.17% increase in crime intelligence personnel and a 23.04% increase in the protection and security services.^{22, 23, 24, 25} Between 2002/2003 and 2011 there was a 50% growth (65 620 more posts) in overall police personnel, leaving the SAPS personnel numbers at 197 930 with a population ratio of 1:323. In 2002/2003 there was a peak in total crime levels, by 2010/2011 there has been a 24% decrease.²⁸

It was suspected that the increases in police personnel around 2010 were due to preparations for the 2010 FIFA World Cup and that the large increases in IO's from 1999 until 2009 can also be explained by this. In the five years before the 2010 FIFA World Cup SAPS recruited 55 000 new police officers and were planning to get 41 000 additional officers with experience in handling sports tournaments. They specifically aimed to increase police visibility. Special units were organised and trained for FIFA World Cup. There was the public order police which managed the crowd control and fighting or hooliganism threats. These consisted for 8500 officers who were specifically trained in a one year programme by the French National Gendarmerie. The tactical response team was established to deal with serious complaints and were stationed at the major cities.²⁶ It was expected that some of the findings for 2009 might have been skewed by the preparations for the 2010 Soccer World Cup. More police personnel were employed; a lot of resources were put into place for

security purposes. The large decrease in FADs could have been skewed by this instead of it being an effect of successful implementation of the FCA. However, when analysing the number of IO's at each police station in 2015 it does however seem that the increases in IO's on 2009 was not purely for the preparation of the tournament, because the higher number of IO's seems to be maintained in 2015. Between 1999 and 2009 there was a 189% increase in the number of IO's per 100 000 in the Camps Bay precinct and then between 2009 and 2015 there was a 50% decrease in the number of IO's per 100 000. This is an unexplainable finding, but no information has been collected on the reasoning behind police employment in certain areas. It is also important to remember that the increases in police presence would usually not precede crime spikes, but rather follow crime spikes. As crime rates increase police might be deployed. In 2015 there were higher numbers of IO's than in 2009, probably because there was an increase in crime, which is also visible in the number of FADs seen in the CWM.

This study has highlighted that the CJS is not functionally optimally and Schönteich (1999) suggests that there are a few weak links in the criminal justice system of South Africa. The first reason being that too many cases end up being withdrawn by the victims because of their lack of faith in the CJS and the long delays in the process. In the case of murder, and thus this study, this is not applicable as a murder case can only be withdrawn in court and not by the police. The second reason being, that a large number of cases go undetected because of a lack of co-operation by the public or because of weak investigative or forensic abilities. This was found to be true in this study as well. Another reason is that because of a lack of properly trained and experienced prosecutors, the prosecution service is taking on too few cases. An important point to note, as stated by Schönteich (1999), is that the South African Police Service and the prosecution service are two separate entities which are dependent on one another for successful crime fighting. Even if the investigation of a crime is flawless, if the prosecution is not functioning optimally there might not be a conviction. This is also true vice versa; if the investigation is flawed; the prosecution will not have enough reliable evidence substantiating a conviction.¹⁷

Shaw (1997) also believes that the CJS has been in trouble for a while because it is a multi-level issue, with multiple blockages which cause delays in the CJS and that this is not easily resolved. The different role-players have never functioned as a unit and other key role players, such as the Departments of Welfare, education and Health are involved sub-optimally involved. Shaw (1997) believes that part of the CJS problem lies with the detective services and the prosecution services,

where individuals are not trained sufficiently and those in the profession leave easily, leaving inexperienced individuals in the profession. There is also very little co-operation between the detectives and prosecutors, where in the lower courts, they meet at the hearing for the first time. Shaw (1997) states that the answer to the operation of the CJS system is for better training to be provided to detectives and prosecutors and those trained should be encouraged to stay in their professions.²⁷ Better collaboration between the detectives and prosecutors is also needed, as well as better co-operation with crime victims and the public, who need to be encouraged to assist the police and co-operate with information about crimes.¹⁷

Conclusion

Even though there were 47% fewer FADs in 2009 than 1999, the investigative outcomes did not improve. The conviction rate is remarkably low for both datasets and more than a third of cases are still being investigated after five years. This is even more disheartening when considering how the number of investigating officers increased between 1999 and 2009. For the 2009 dataset, two extra categories had to be added because more information regarding why a case was closed (at an impasse) was not available, skewing the true outcomes that led to impasses. The downward trend in FADs seen at SRMLL also did not continue past 2011. All of this would suggest that the CJS is not functioning optimally.

Limitations

Both the 1999 and 2009 studies only examined cases where the autopsy was conducted at SRMLL, which equates to roughly the geographical area of the CWM. Some FADs might have been omitted should the autopsies have been conducted at another mortuary. It is accepted that a small number of the post-mortems conducted at SRMLL were cases which actually should have been designated to another mortuary and it is proposed that these cases would cancel each other out. Only studying the cases at one mortuary is a limitation in itself as no inferences can be made about the larger population. The conclusions made can mostly make inferences about the CWM, not even Cape Town. From the Brown *et al.* (2015) study it is clear that there are differences in conviction rates between geographical areas, specifically between metropolitan and non-metropolitan areas.

These two studies were only conducted on data from two years, 1999 and 2009 and they were one decade apart, therefore making inferences about the years in between (2000 – 2008) will be inaccurate.

Having to create the outcomes 'filed' and 'excluded' for 2009 cases is a limitation of data collection, as ideally one would have preferred that the outcomes of all cases would have been defined amongst the following outcomes:

- No suspect has been identified through the police investigation
- A warrant is out, but the suspect cannot be traced
- Not Prosecuted – there was a suspect but the court decided not to prosecute
- Suspect Dead – a suspect was identified, but he/she passed away in the mean time

This leaves a misrepresentation in the number of cases that do fall in those categories, as there may have been more in each category.

When using population estimates there is a degree of uncertainty, especially in the analysis of the number of IO's in 2009 and 2015. In both instances the population size used was the same, because the census data available is for the 2011 population, somewhere between 2009 and 2015. The 'CrimeMap' by the ISS where we obtained this information is very useful and to the best of our knowledge the only source breaking the population down to precinct level.²⁰ This alleviates some inaccuracies, when the alternative would have been estimating the population size.

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Chapter 4 Victimology

The South African Crime Quarterly (SACQ), chosen for the publication-ready manuscript has a policy against racial classification. Seeing that an important part of the victimological study uses racial classification, this chapter could not be included in the manuscript. This information was however collected and would have been a waste not to use, it is however also important. It was thus included as a chapter on its own, which might also be publishable in the future. This chapter will describe the victimology of FADs in the CWM in 2009, and also compare this to what was found in 1999.

Victimology

One part of this study is looking at the victimology of 2009 and the comparison to that of 1999, as found by Liebenberg (2004). It was not included in the publication-ready manuscript, mainly because the chosen journal limits the use of racial classifications. Demographics form a major part of a victimological study. Another reason is that there is a vast amount of literature available on victimology and needs to be addressed in a separate publication. It was therefore decided to write the article on the investigative outcomes and the comparison between 1999 and 2009 as there is a dearth in the available literature. This may lead to more interesting and impactful information.

Methodology for victimology

The database (office autopsies) was used to filter for all FADs, and then the post mortem records were used to gather any information not available on the database. The CAS numbers were mostly missing from the database and had to be obtained from the hard-copy post-mortem reports. All the post mortem reports for 2009 were also examined to determine whether FADs were missed on the database. There were some that were missed, and these were mostly the cases where the cause of death (COD) was due to a combination of weapons, including stabbing and blunt force.

Below is a list of the information collected on each FAD:

- WC11 number (SRMLL serial number)
- CAS number and police station
- Pathologist
- Date of autopsy
- Estimated date and time of death
- Location of death
- The sex, race and age of the victim
- The manner of death as given by the pathologist
- The blood alcohol concentration
- Any interesting findings, such as other toxicology results
- Information about the alleged weapon was also collected, but this was not included in the analyses as it was unsure how accurate the information was.

The information was captured in an Excel spreadsheet and all the information was represented in easily analysable numbers, for example if an individual was 25 years old a '1' is typed into the 21 to 30 year age category. Tables were created with the totals for each category and these were then used to create tables and figures for descriptive and comparative purposes. The data was also

statistically analysed using the STATA statistical package. For the comparisons between 2009 and 1999 data, the two sample test of proportions was used and for comparisons between categories within a year the Pearson's Goodness of Fit test was used. A significance level of <0.05 (p or z-value) was used as inferring statistical significance.

Graphs were created showing the different categories and comparing them. A statistical significance is shown by either red or green lines or stars. The lines connect all the categories that were compared and show significant differences between them. Two colours were used to distinguish between different comparisons on one graph, for example when comparing the different outcomes there was a comparison of one category between 1999 and 2009 and this would be represented in red. There could also be a significant difference amongst the categories within one of the years, which is then indicated with green. This allows for demonstration of different statistical comparisons on one graph. In some cases the statistical significance would only be unidirectional, i.e. using one-tailed hypothesis testing instead of two-tailed testing. This significance is indicated with an asterix (*) next to the red or green stars.

Results

Number of FADs

In 1999, there were 532 firearm death cases and in 2009 there were 281 cases. Relative to the total number of deaths at SRMLL (3146 in 1999 and 2905 in 2009), there is a statistical significant difference between 1999 and 2009. Because 2009 had fewer cases, the number of FADs from 1999 until 2015 was also investigated to determine whether a trend exists or whether 2009 had particularly few cases. Table 4-1 indicates the number of FADs from 1999 until 2015.

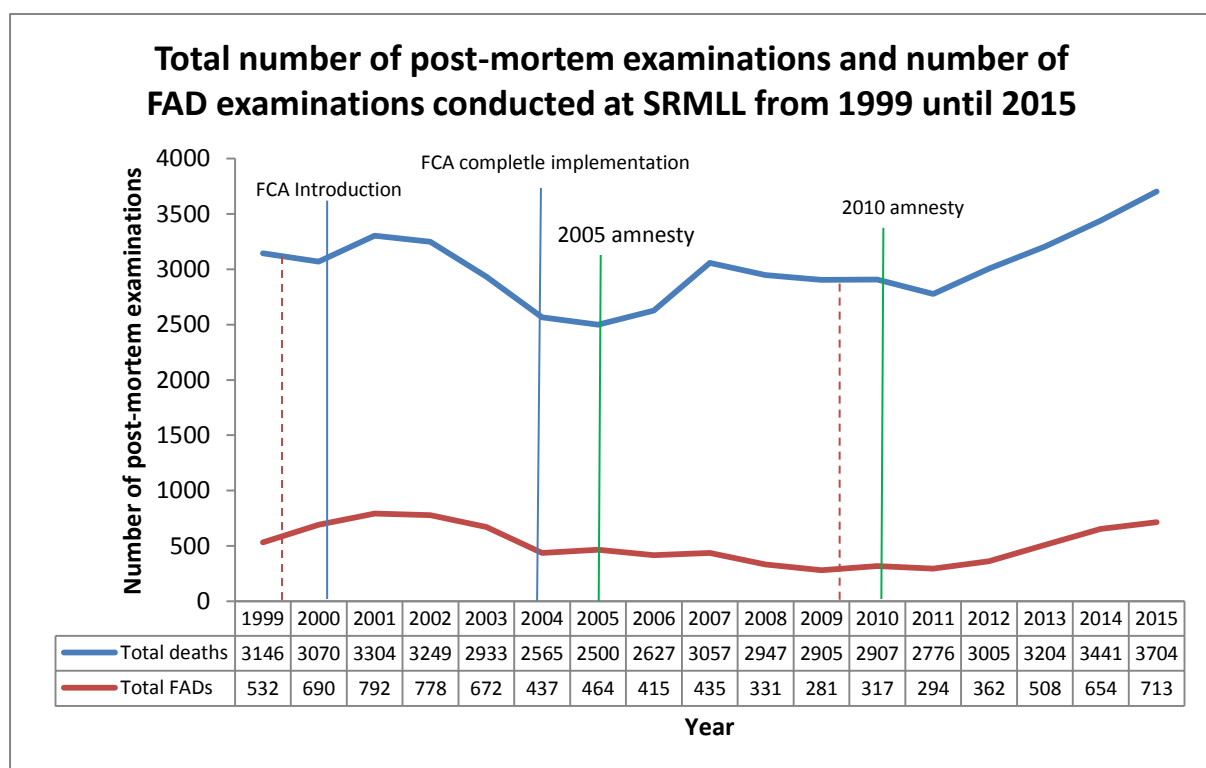


Figure 4-1: Graph representing the annual SRMLL intake and number of FAD cases for 1999 until 2015.

The red dotted lines indicate the two years of interest for this study. The blue lines indicate the years when the FCA was introduced (2000) and the year the FCA was completely implemented. The green lines indicate the amnesty periods (2005 and 2010).

Manner of death

For the manner of death, the post-mortem records were scrutinised. There are quite a few discrepancies between the manner of death as recorded by SAPS and that reported by the mortuary. The post-mortem records are limited to three different manners of death, being homicide, suicide and other. The SAPS data yield many different manners of death and some of those fall in one of the other three, for example a homicide case can be seen as an inquest by the police, because it is not very clear whether someone should be held responsible. A suicide can also be called an inquest to allow investigation of the death. In the 1999 data the manner of death obtained from the post-mortem records were used, thus it only made sense to do the same for the 2009 cases. It is important to note that the suicides included victims of extended suicide, for comparative purposes, as Liebenberg (2004) included extended suicides under suicides. Figure 4-2 illustrates the percentage of FADs by manner of death.

It has to be noted that some typographical errors were noted in the dissertation from Liebenberg (2004). When adding up the frequencies in all the categories of specific tables there are some discrepancies. In some instances the total number of suicides adds up to 56 and the homicides to 476, when it should in fact be 57 and 475 respectively. Some of the raw data could be traced, but not all and therefore it was decided not to correct these errors. This discrepancy comes down to one case, when considering all the cases it amounts to 0.19% of all cases, which should not affect the comparison too greatly. The only area where it might be doubtful is for the suicides. The areas where discrepancies were noted were in the age of the victims, the month and day of death and the BAC. Because the raw data shows there are 57 cases, this is the value (n) used to calculate significant differences and percentages for 2009 and thus 475 was used for homicides. One error was corrected, because it has a significant impact. In 1999 there was said to be 8 suicides in August, when according to the raw data there were none, this was changed to zero, leaving the total number of suicides at 56 when considering the month of death. The total number of homicides for that analysis was thus 476.

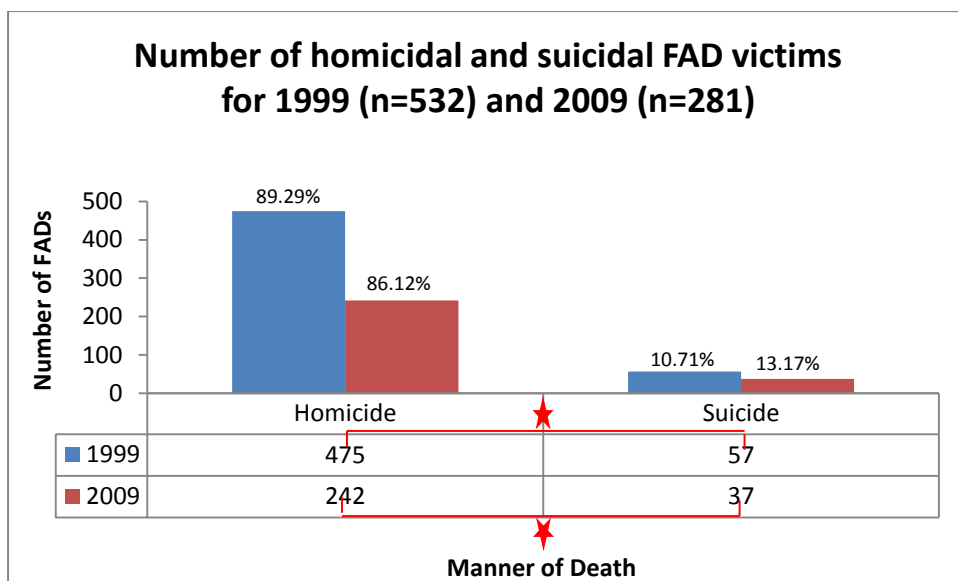


Figure 4-2: A graphic representation of the percentage of homicidal and suicidal FADs in 1999 and 2009.

The bars represent the percentage, the number above the bars represent the actual number of FADs in that category. There was no significant difference between the percentage homicidal and suicidal FADs respectively between 1999 and 2009. There was however a significant difference between the percentage of homicides vs. suicides for 1999 and 2009. This is represented by the green lines and star in the graph.

Figure 4-3 is a plot of the total number of FADs seen at SRMLL between 1999 and 2015, as well as a breakdown of the FADs according to manner of death.

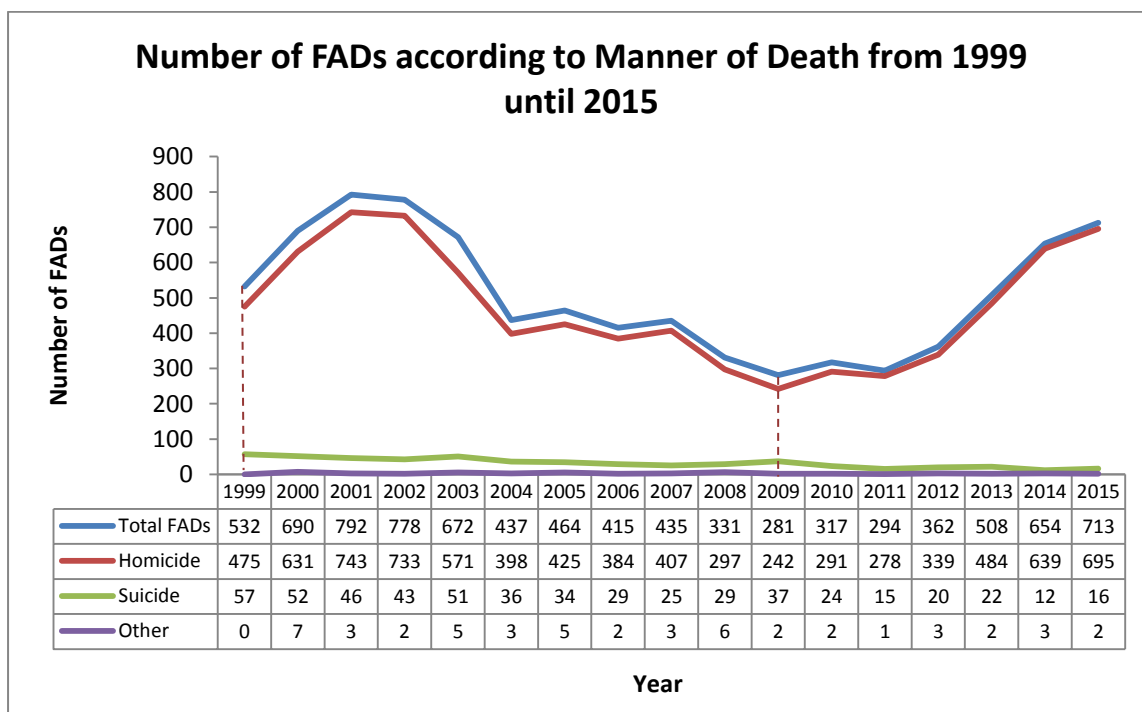


Figure 4-3: The number of FADs examined at SRMLL between 1999 and 2015, by manner of death.

The dotted lines indicate the two years of interest to this study.

Other manners of death

In 2009 there were two cases where the manner of death was classified as 'other'. These were included in the calculation and analysis of the total number of FADs, but were not represented on the graphs purely for aesthetic purposes, there were many areas without a bar or a 'gap' in the graph purely because there were so few cases with other manner of death. One of these cases was an accident where the victim shot himself while cleaning a firearm. According to the SAPS records it was a suicide and the docket was filed. The second case was classified as other because the cause of death was undetermined, and an old bullet was found. This is not a FAD per se and although it could have been omitted from the analysis, it was retained as cause of death and the manner of death could not be determined. SAPS documented this case as a natural death and the docket reached an impasse and was filed without stating the reason why it reached an impasse. Both cases occurred in August 2009, the one on a Saturday and the other on a Sunday, and both occurred between 6:00 a.m. and 12:00 a.m. The one victim died in hospital and the other at a location specified as 'other'. Both were males, the one 25 and the other 33 years old and both had BAC of 0.00g/%.

Victimology of 2009 FADs

The majority of all FAD victims were male, this also holds true for homicidal FADs and suicidal FADs, which is a statistically significant finding. In 1999 there was also a significant difference between males and females (Figure 4-4).

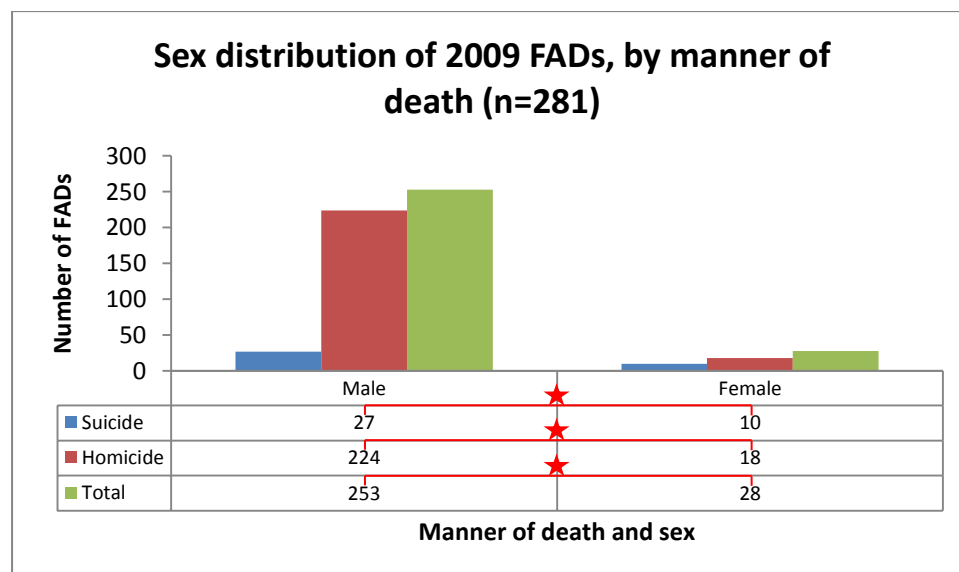


Figure 4-4: A graph representing the sex of FAD victims of 2009, by manner of death.

The red lines and stars indicate the areas where there were significant differences between males and females.

As illustrated in Figure 4-5, most of the 2009 FAD victims were in the 21 to 30 year age category, which was also true for the homicide FAD victims. With suicide FAD victims however, the most common age at death was between 31 and 40 years. There were significant differences among the age categories of homicides, suicides and all FADs. There were also significant differences between the age categories in 1999. In 2009 the average age at death for FAD victims was 31 years, with the youngest being four years old (victim of extended suicide) and the oldest being 82 years old (suicide). With homicide victims the average age at death was 30 years, the youngest victim being 14 and the oldest 69 years. The suicidal FAD victims were slightly older, with the average age at death being 45 years old, the youngest being four and the eldest 82 years old.

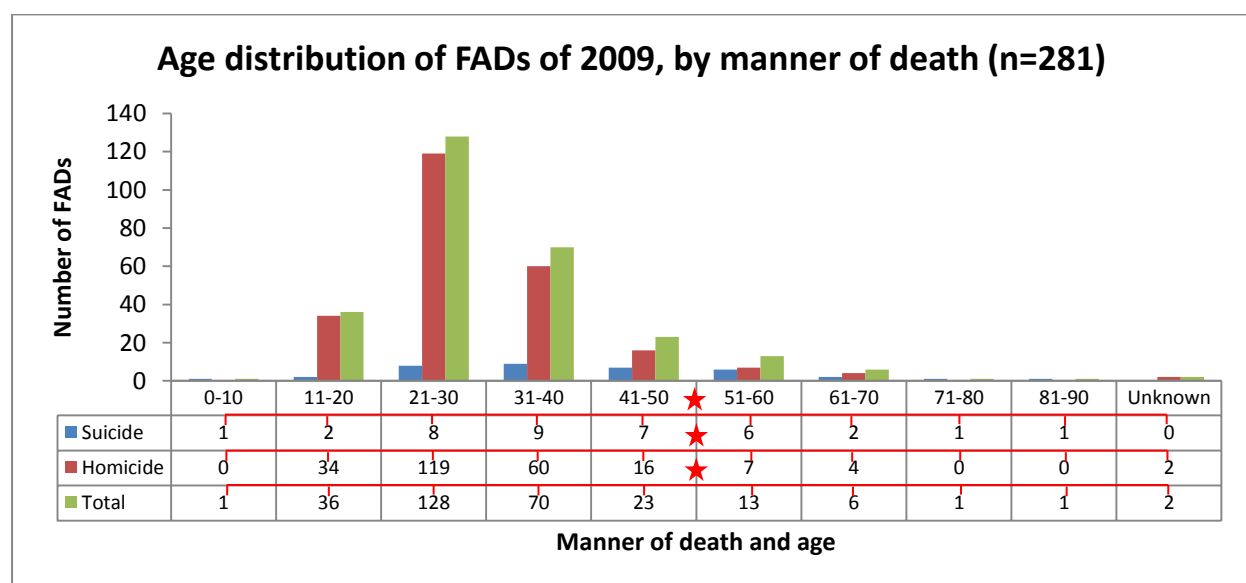


Figure 4-5: A graph representing the age distribution of 2009 FAD victims, by manner of death.
The red lines and stars indicate the areas where there were significant differences

As can be seen in Figure 4-6 there were more Black victims who died due to firearms. Black and Coloured individuals were more likely to be victims of homicide than suicide, whereas White victims were more likely to die due to suicide. There were statistical significances between the racial distributions for all FADs, homicides and suicides. It does have to be acknowledged that there are also underlying differences in racial population sizes. In 1999 there was also a significant difference between the different races.

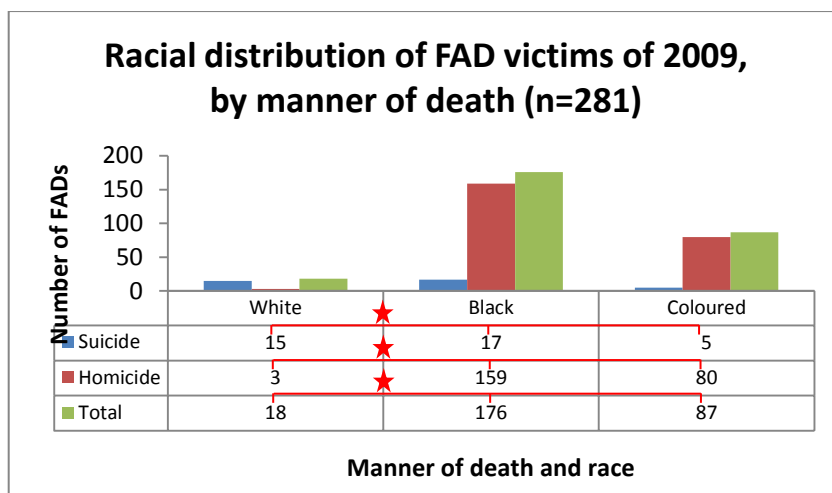


Figure 4-6: A representation of the racial distribution of 2009 FAD victims, by manner of death.
The red lines and stars indicate the areas where there were significant differences

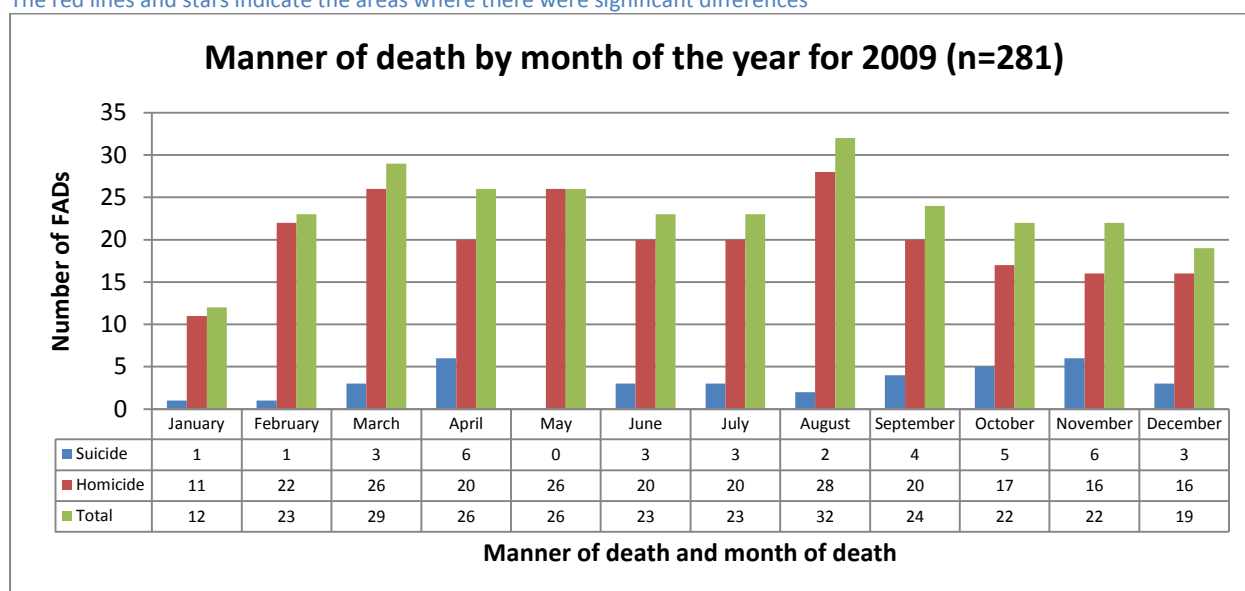


Figure 4-7: A distribution of month of death of FADs in 2009, by manner of death.
There were no significant differences among the month of death for any of the types of FADs

There are not such strong patterns regarding the month of death for FAD victims. The peaks seen for total FADs are in March, April, May and August, with homicides mirroring this pattern. Suicidal FADs however, peak in April, October and November (Figure 4-7).

Most FADs, including homicidal FADs, occur on weekends, with the largest number of deaths occurring on Sundays, which is statistically significant (Figure 4-8). With suicides there is a more even distribution, but with Wednesdays and Thursdays seeing a few more suicidal FADs, however this is not statistically significant. There were no significant differences between the months of death in 1999.

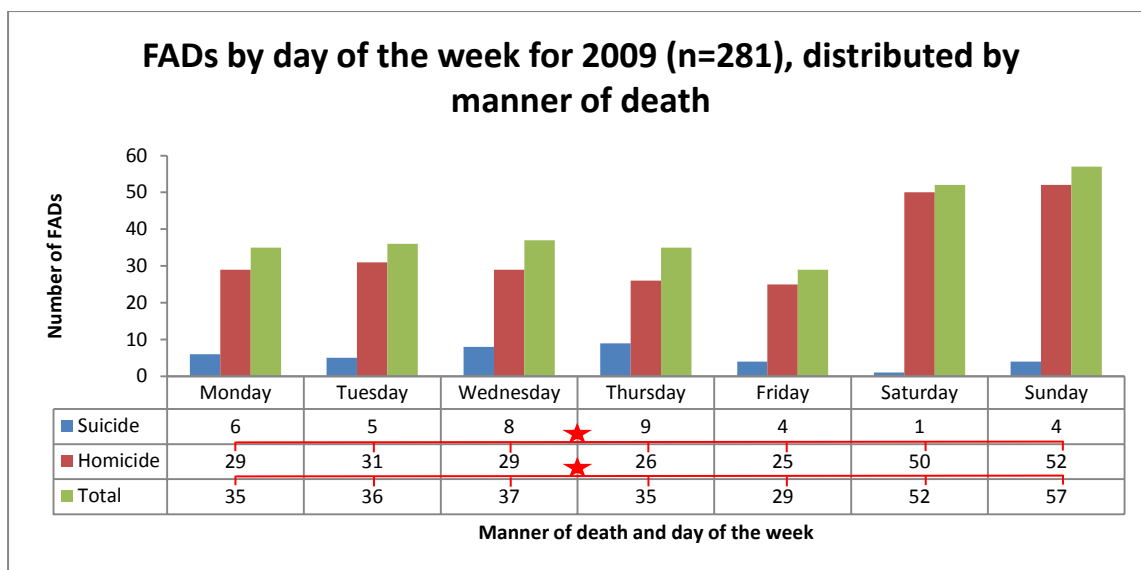


Figure 4-8: A representation of the monthly distribution of 2009 FAD victims, by manner of death.
The red lines and stars indicate the areas where there were significant differences.

FADs are also more likely to occur at night-time, or between the hours of 6 p.m. and 6 a.m., which is true for FADs in general and homicides (Figure 4-9). Once again suicidal FADs are more spread-out and no significant differences were found among the different time of death categories.

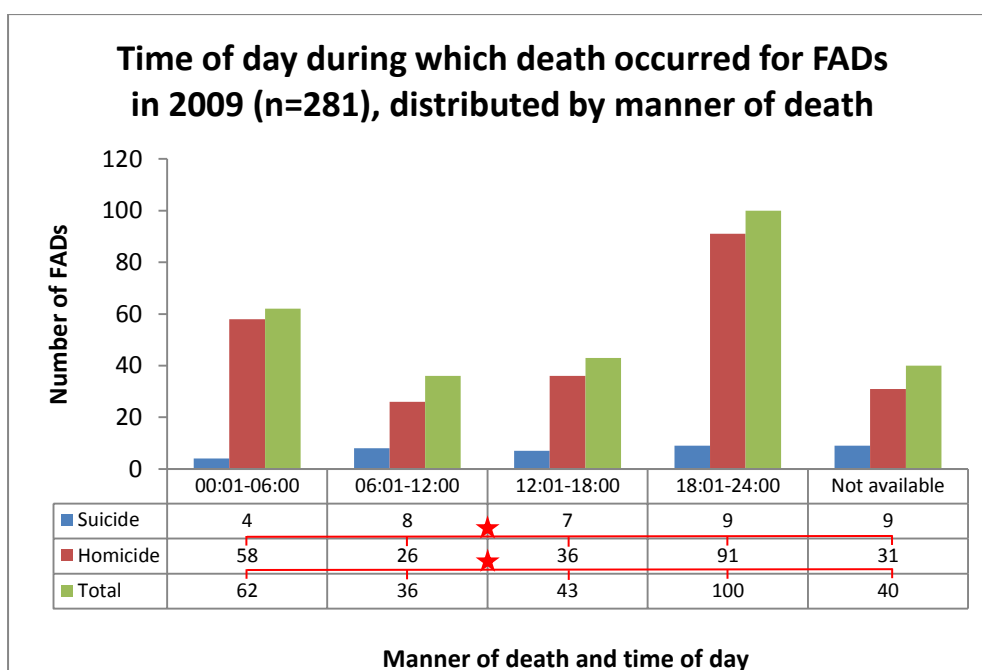


Figure 4-9: Time of day that FADs occurred in 2009.
The red lines and stars indicate the areas where there were significant differences.

Blood was sent to the Forensic Chemical Laboratory for BAC testing. In 76 of all cases the concentration was unknown, either because blood was not tested for BAC or because a report was

not yet received from the laboratory. In 2009 there were quite a large number of victims who were sober, as shown in Figure 4-10. It is a bit easier to compare between negative and positive BAC cases when simplified into three categories as in Figure 4-11. There are significant differences between the categories when breaking it down into concentration ranges (Figure 4-10) or three categories (Figure 4-11). It is however concerning that there are quite a few cases where the BAC is quite high, far over 0.05g/%. In the suicidal FAD cases the victims who tested positive all had BACs well over 0.16g/%. For homicidal FADs there were 50 victims with BACs over the legal driving limit, but it was more evenly spread than the suicidal FADs with not quite such a large representation at the higher ends of intoxication.

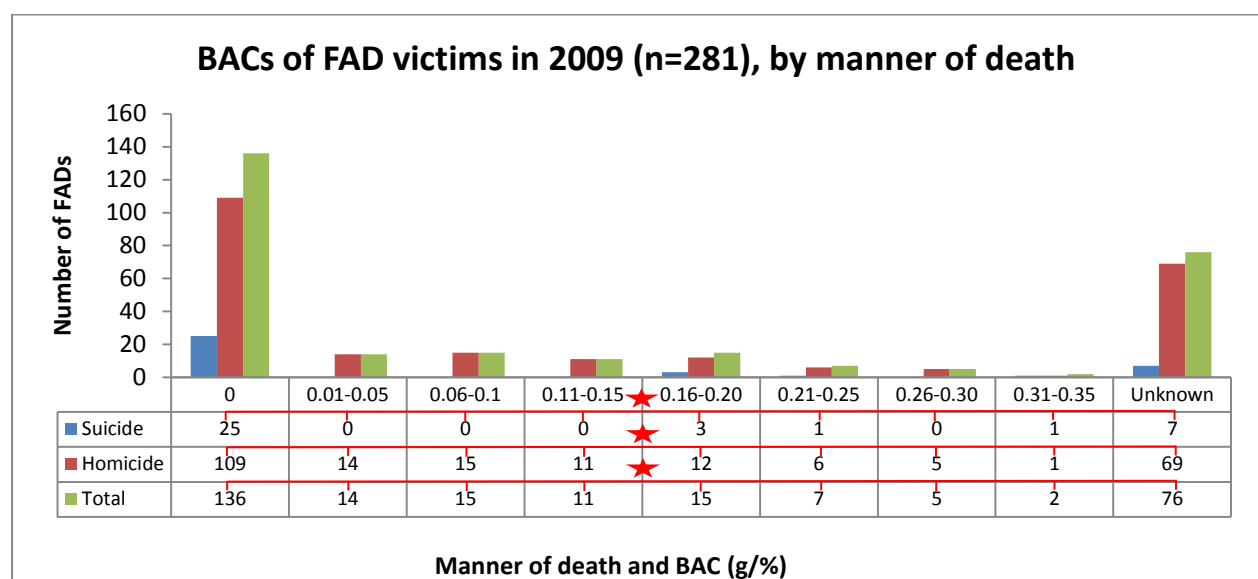


Figure 4-10: Number of FAD victims (suicide and homicide) in 2009 by general toxicology testing outcome (BAC). The red lines and stars indicate the areas where there were significant differences.

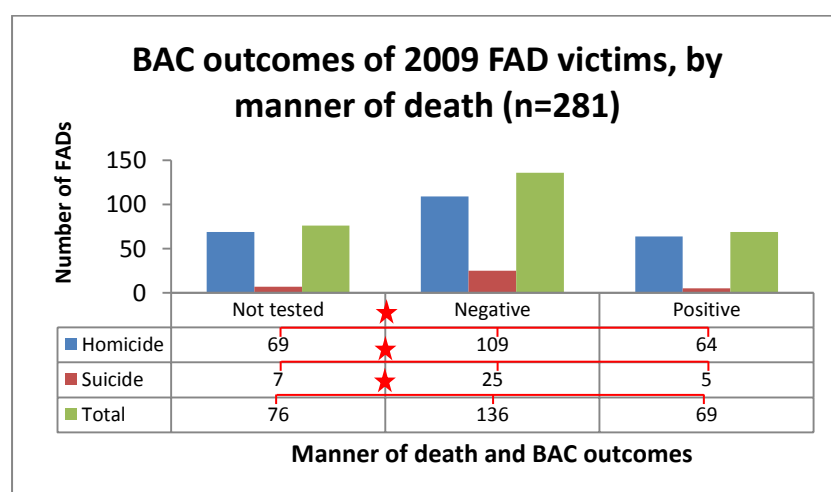


Figure 4-11: BAC outcomes according to manner of death.

The outcomes are, not tested (unknown), negative and positive. The red lines and stars indicate the areas where there were significant differences

2009 versus 1999 comparisons – homicide

In 2009 and 1999 victims between the ages of 21 and 30 were most likely to fall prey to firearm related homicides, as seen in Figure 4-12. In 1999 there were five victims under the age of 11, which is quite shocking. There are no significant differences in age categories between 2009 and 1999.

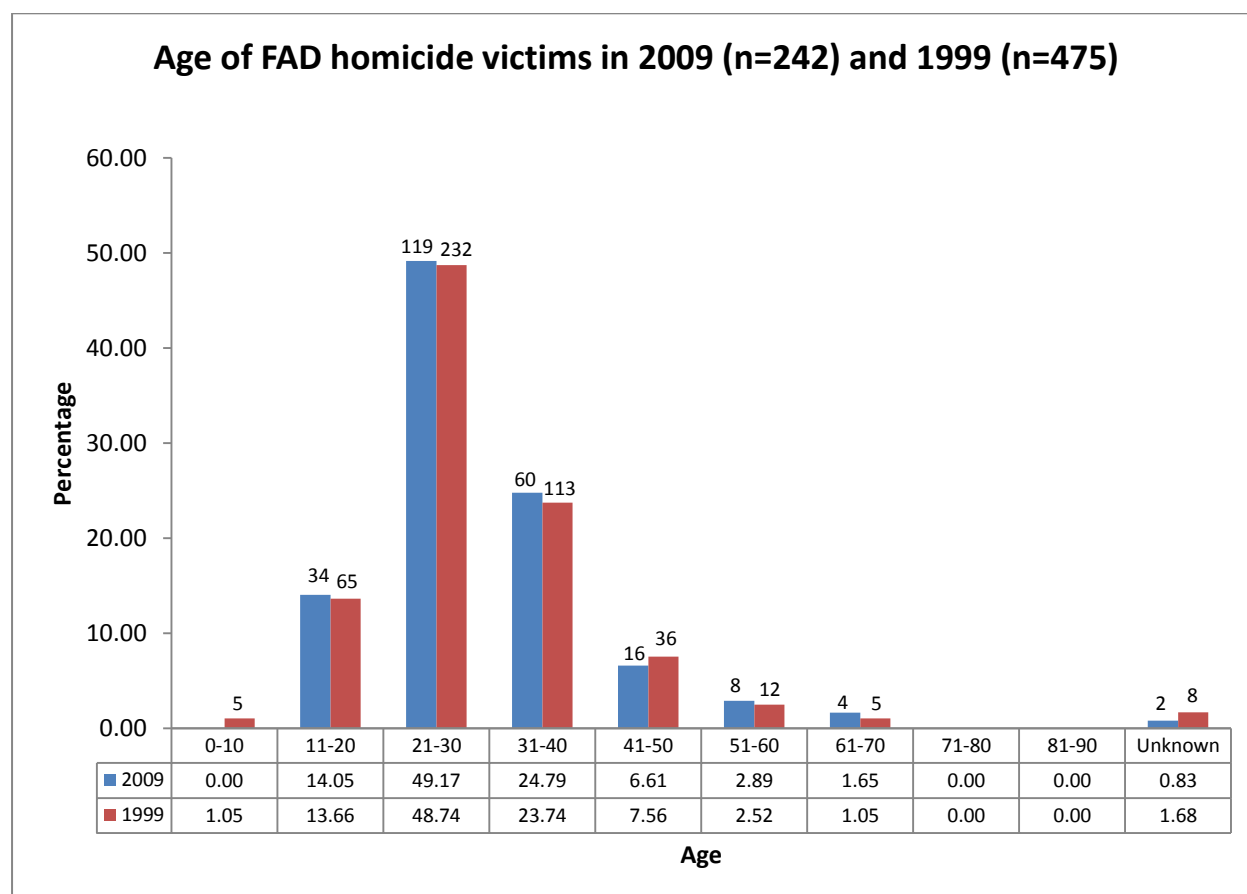


Figure 4-12: Comparison of age between 2009 and 1999 FAD homicide victims.

The bars represent the percentage of FADs in that category, the numbers above the bars indicate the actual number of FADs in that category.

As seen in Figure 4-13, Black males are the most common victims of firearm related homicides in 1999 and 2009. In 1999 there was a larger representation of Coloured males than in 2009. 1999 also had victims of another race, as opposed to 2009 which only had victims of Coloured, Black and White ethnicities. Between 1999 and 2009 there were significant differences in the percentage of Black and Coloured males. There is also a one-sided significant difference in Coloured females, i.e. it is only significant if assuming that 1999 had more Coloured females than 2009, instead of making the null hypothesis that the percentages can be equal.

In 1999, most homicidal FADs occurred in May, with secondary peaks in March as well as from September to December. In 2009 the highest number of homicidal FADs occurred in August, with peaks also in February and May. This is illustrated in Figure 4-14. The only significant differences between 1999 and 2009 were in January and August.

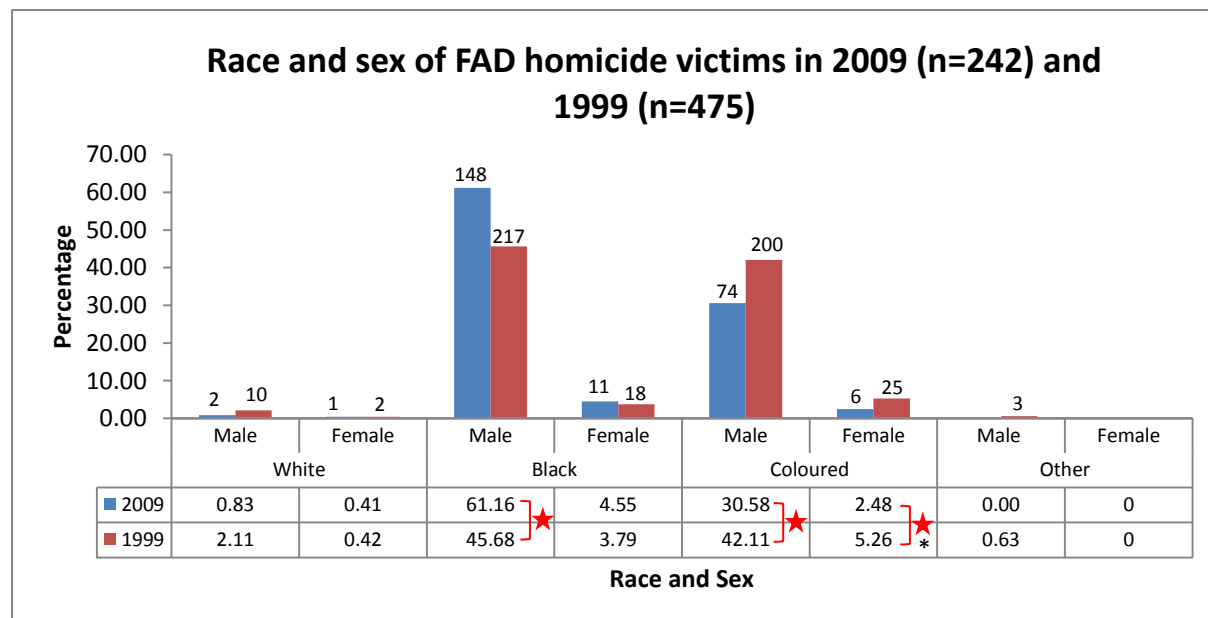


Figure 4-13: Comparison of race and sex between 2009 and 1999 homicide FAD victims.

Significant differences are indicated by the red lines and stars, the asterisk indicating unidirectional significance. The bars represent the percentage of FADs in that category, the numbers above the bars indicate the actual number of FADs in that category.

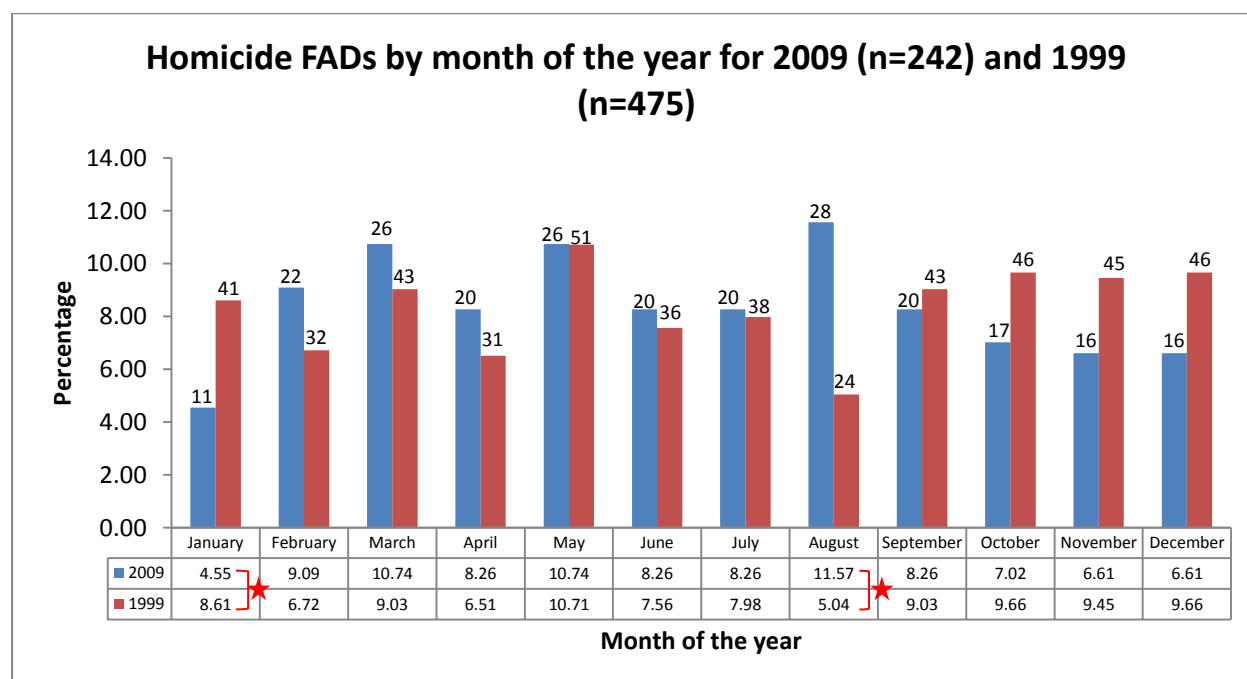


Figure 4-14: Comparison of month of death between 2009 and 1999 homicidal FADs.

Significant differences are indicated by the red lines and stars. The bars represent the percentage of FADs in that category, the numbers above the bars indicate the actual number of FADs in that category.

Homicidal FADs are also more likely to occur on weekends, and this was found in both 2009 and 1999 periods (Figure 4-15). The only statistically significant difference was on Saturdays, and only when the null hypothesis is that 1999 had more FAD homicides than 2009, not when the null hypothesis is that they had an equal number of homicides.

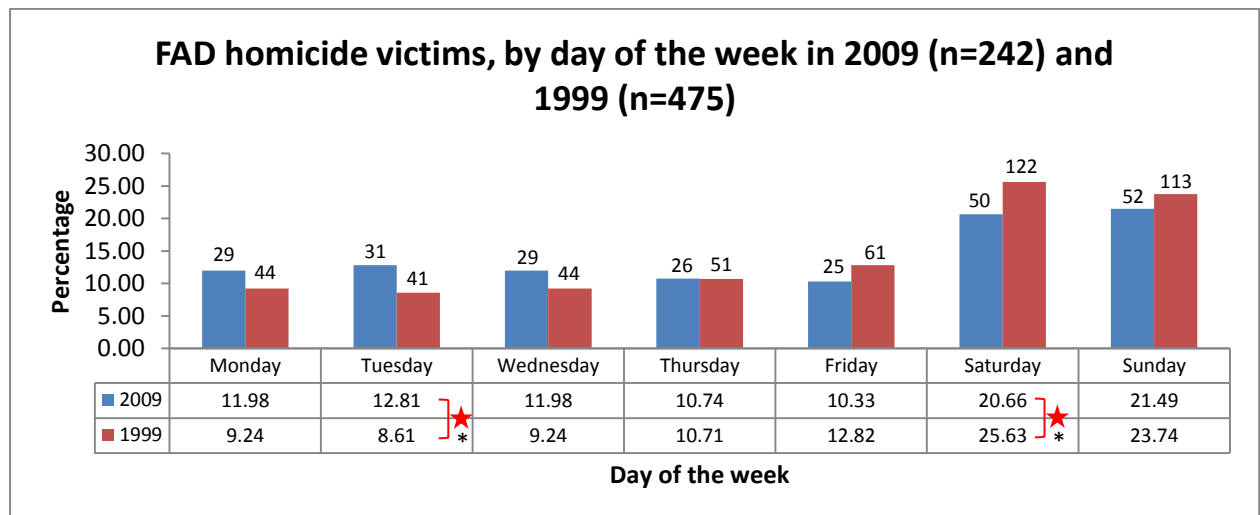


Figure 4-15: Comparison of day of death between 2009 and 1999 FAD homicides.

The significant differences are indicated by the red lines and stars, the asterix indicating unidirectional significance. The bars represent the percentage of FADs in that category, the numbers above the bars indicate the actual number of FADs in that category.

Blood alcohol concentrations were available in some instances. In both years about 45% of FAD homicide victims did not have a blood alcohol report available, either because they were not tested or the report was not issued by the Forensic Chemical Laboratory. In 2009 there were slightly more cases that were not tested than 1999 and slightly fewer victims that tested positive. This is indicated by Figures 4-16 and 4-17.

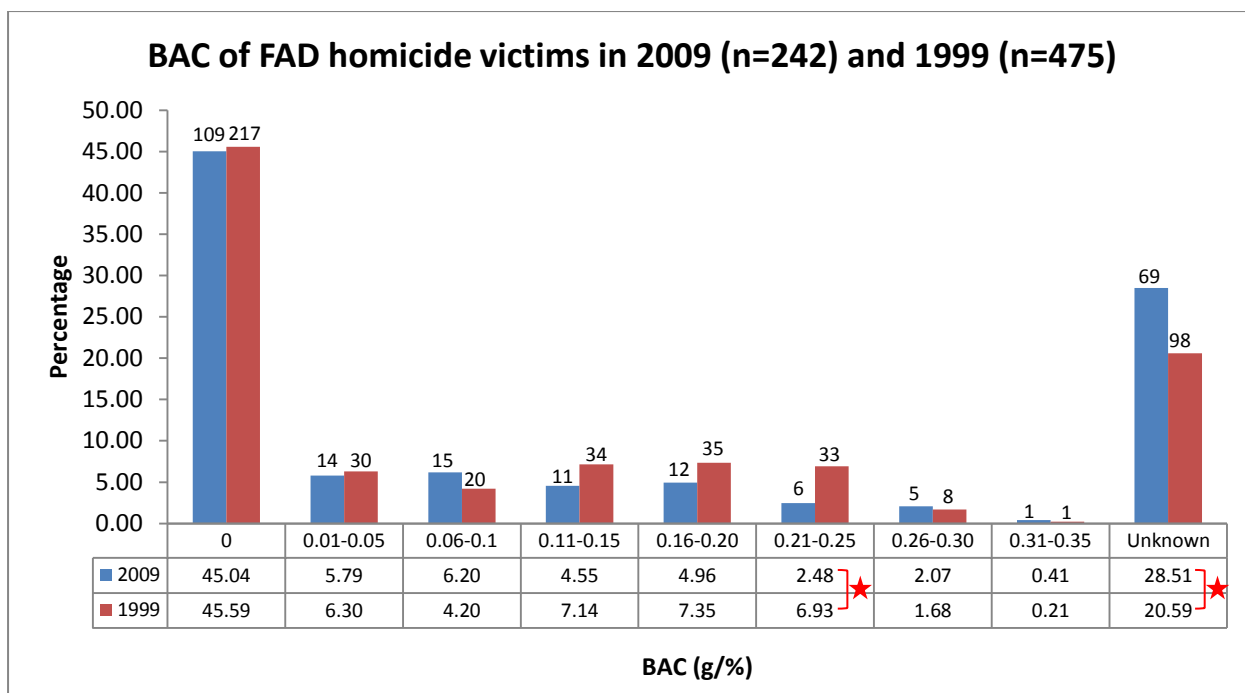


Figure 4-16: Comparison of BAC concentration of FAD homicides between 2009 and 1999.

Significant differences are indicated by the red lines and stars. The bars represent the percentage of FADs in that category, the numbers above the bars indicate the actual number of FADs in that category.

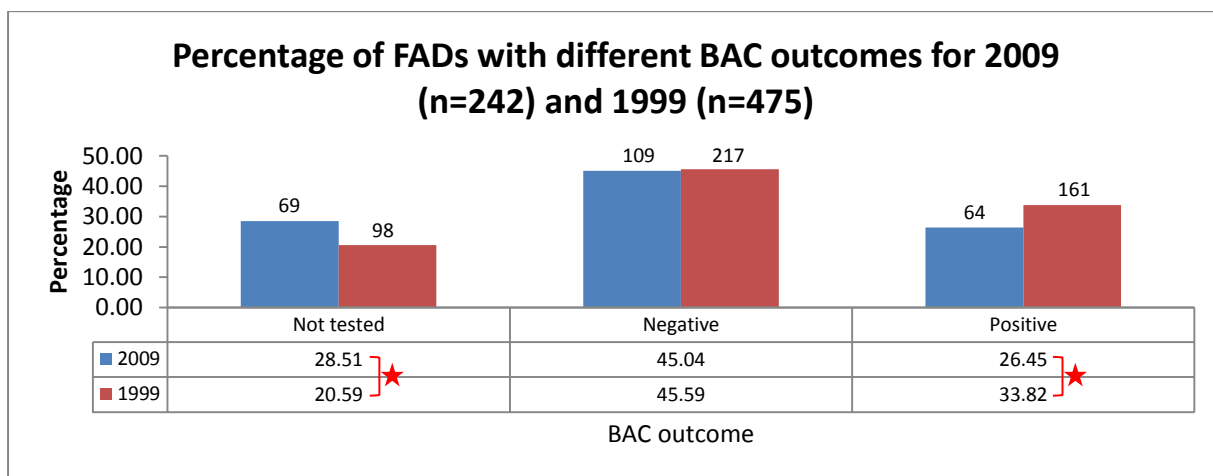


Figure 4-17: Comparison of BAC outcomes of FAD homicides between 2009 and 1999.

Significant differences are indicated by the red lines and stars. The bars represent the percentage of FADs in that category, the numbers above the bars indicate the actual number of FADs in that category.

2009 versus 1999 comparison –suicide

The ages of suicide victims had quite a large range, starting at the very youngest age category and ending at the oldest in 2009 (Figure 4-18). It is important to remember that victims of extended suicide are included. The victims who fell in the 0-10 year age category for 2009 was a four year-old victim of an extended suicide and did not kill himself. The only significant difference between 2009 and 1999 is in the 11 to 20 year age category and this once again is only one sided, i.e. it only holds true if the null hypothesis is that there were more victims in this category in 2009 as opposed to 1999.

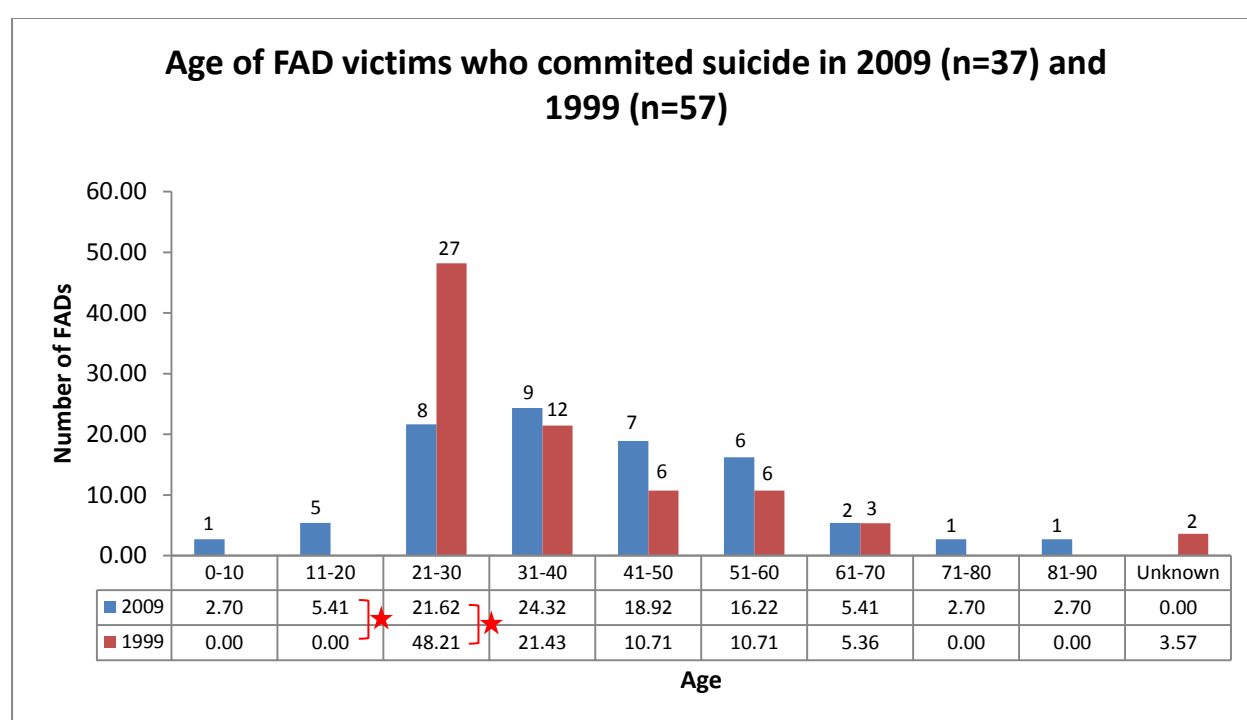


Figure 4-18: Comparison in age of FAD suicide victims between 2009 and 1999.

Significant differences are indicated by the red lines and stars, the asterix indicating unidirectional significance. The bars represent the percentage of FADs in that category, the numbers above the bars indicate the actual number of FADs in that category.

As shown in Figure 4-19, in 1999 approximately a third of suicide victims were White males and another third were Coloured males. In 2009 approximately a third of suicide victims were also White males and another third were Black males, not Coloured males. Here is an area where there are quite a few significant differences between 1999 and 2009, first being among the Black males and females and then also being among the Coloured males.

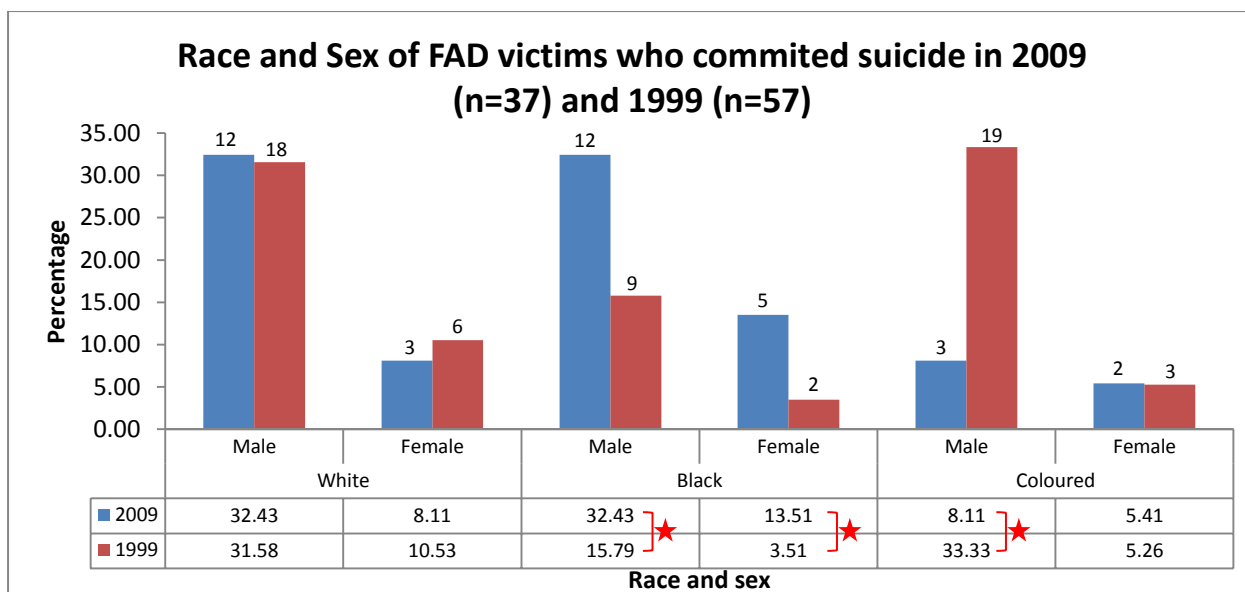


Figure 4-19: Comparison of race and sex of FAD suicide victims between 2009 and 1999.

Significant differences are indicated by the red lines and stars. The bars represent the percentage of FADs in that category, the numbers above the bars indicate the actual number of FADs in that category.

In terms of the month of death for suicidal FADs, there were not many significant differences between 1999 and 2009, the only one being in June, but also only if the null hypothesis is that 2009 had more suicidal FADs in June than 1999 (Figure 4-20).

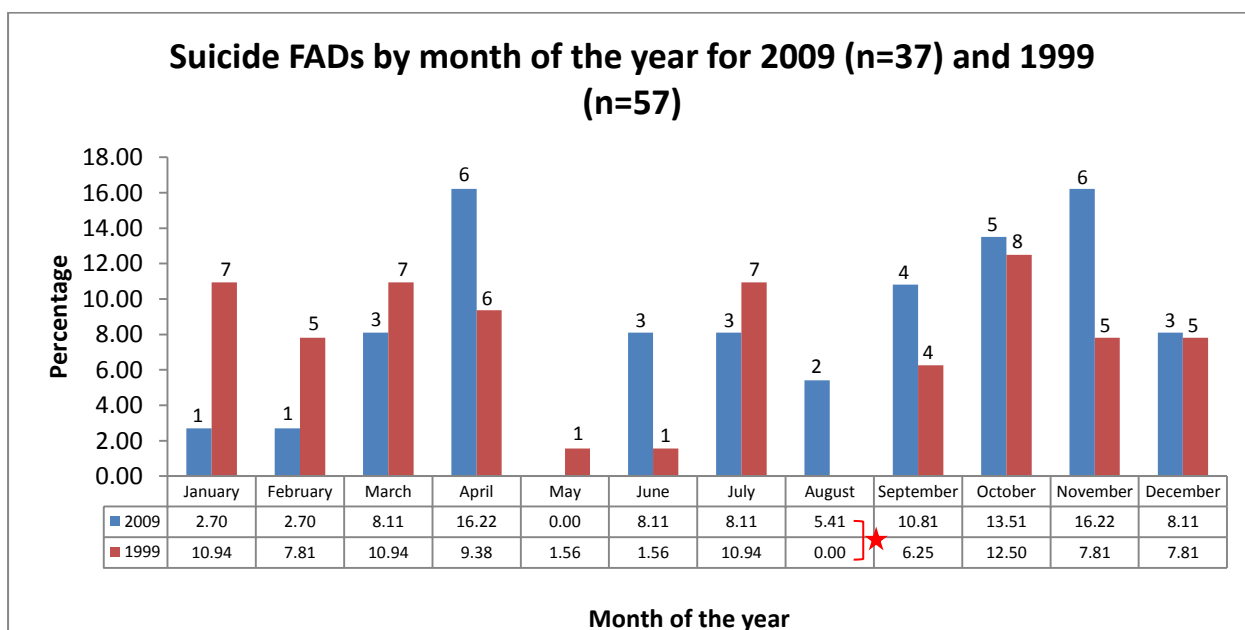


Figure 4-20: Comparison of location of death of suicide FAD victims between 2009 and 1999.

The significant difference is indicated by the red lines and star, the asterisk indicating unidirectional significance. The bars represent the percentage of FADs in that category, the numbers above the bars indicate the actual number of FADs in that category. In the dissertation by Liebenberg (2004) August 1999 was said to have eight suicidal FADs, upon examination of the raw data it was determined to be zero.

There were differences in terms of the day of the week on which a suicidal FAD occurred between 1999, the first being on Thursdays and the second being on Saturdays (Figure 4-21).

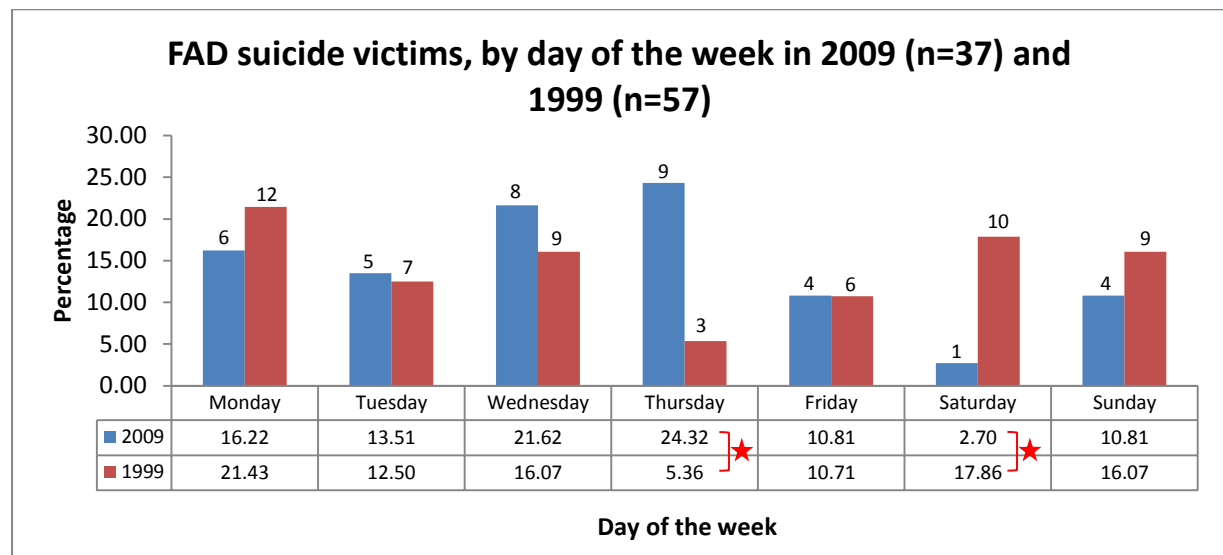


Figure 4-21: Comparison of day of death of suicide FAD victims between 2009 and 1999.

Significant differences are indicated by the red lines and stars, the asterix indicating unidirectional significance. The bars represent the percentage of FADs in that category, the numbers above the bars indicate the actual number of FADs in that category.

From Figures 2-22 and 2-23 it seems as if the suicidal FAD victims were more often sober in 2009 than in 1999. There was a significant difference in the percentage of victims that tested negative between 1999 and 2009. There is also a difference in the percentage of victims that tested positive between 1999 and 2009. For the 0.11 to 0.15g/% category there is a significant difference only if the null hypothesis is that 1999 had more FAD suicides in that category.

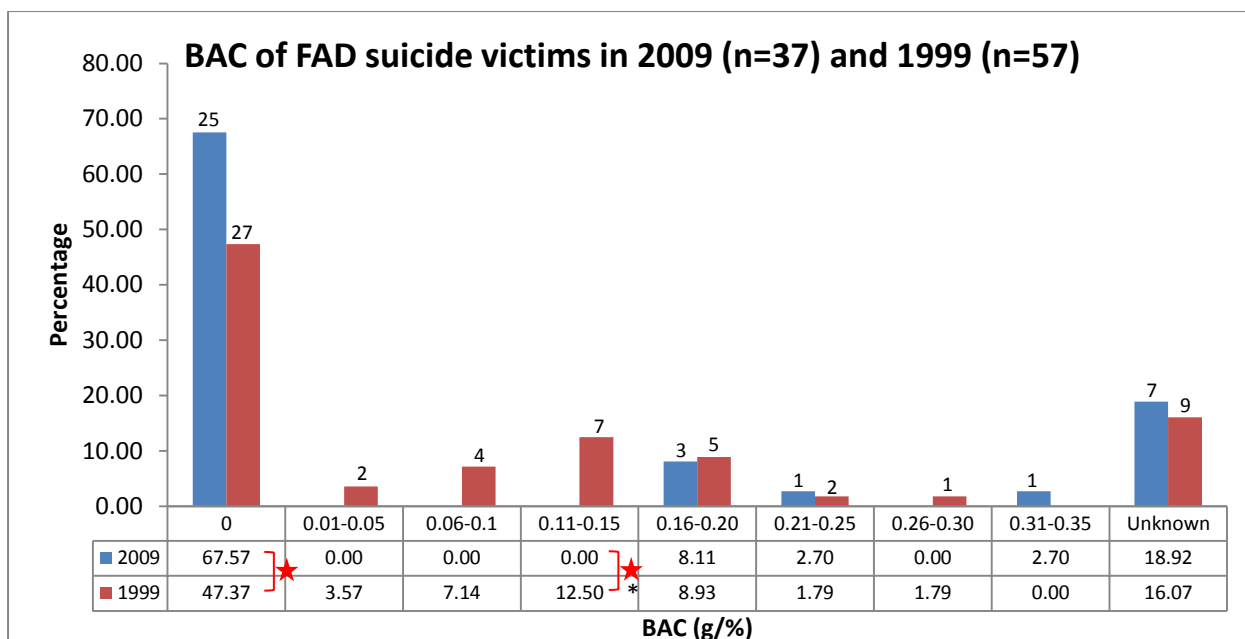


Figure 4-22: Comparison of BACs of suicide FAD victims between 2009 and 1999.

Significant differences are indicated by the red lines and stars, the asterisk indicating unidirectional significance. The bars represent the percentage of FADs in that category, the numbers above the bars indicate the actual number of FADs in that category.

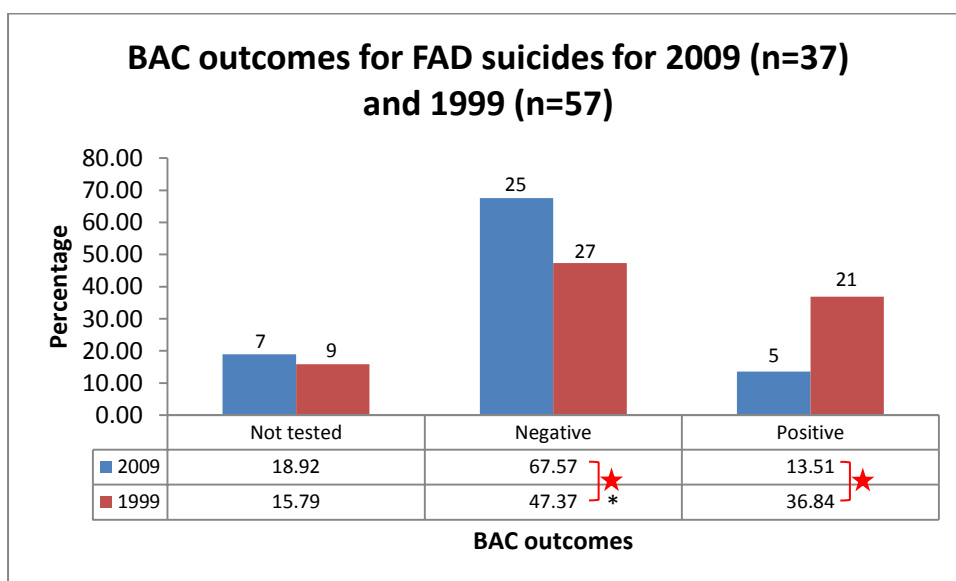


Figure 4-23: Comparison of BAC outcomes of suicide FAD victims between 2009 and 1999.

Significant differences are indicated by the red lines and stars, the asterisk indicating unidirectional significance. The bars represent the percentage of FADs in that category, the numbers above the bars indicate the actual number of FADs in that category.

Discussion and conclusion

In 2009 there were almost half as many FAD cases as in 1999, however this is not an isolated phenomenon, but rather part of a trend that was seen with FAD cases at SRMLL. Since 2001 there was a decrease in the number of FADs and this decrease led to the lowest number of FADs seen in a decade (281 FADs in 2009). From 2010 there were slight increases again, followed by massive increases from 2013 until 2015. In the past decade the victimology of FADs has not changed much. The main group of victims is still Black males between the ages of 21 and 30 years of age, however there has been a smaller representation of Coloured males which created a significant difference in the racial distribution between 1999 and 2009. Overall there seem to be slightly more sober victims in 2009 than 1999. The suicide victims that had positive BACs in both years had very high BACs, and there seems to be no middle ground.

Reference

Liebenberg, L. 2004. Firearm fatalities examined at Salt River Medico-Legal Laboratory in 1999 and their investigative outcome by 2004. Unpublished Master's dissertation. University of Cape Town.

Chapter 5 Conclusion

This chapter will focus on summarising all four previous chapters, specifically chapters three and four.

Overall conclusions

The biggest challenge and limitation of this study is the data collection. It took a long time and severely impacted the proposed timeline of the project. In the end however, some interesting results were established, which might lead to more questions than answers.

South Africa is said to have a very long history of gun violence, particularly politically motivated. The politically motivated gun violence did subside after 1994, however there was an increase in criminal gun violence. In 2000 new legislation was put into place, which is the Firearms Control Act (1) of 2000 (FCA) and from 2001 to 2005 there was a 13.6% decrease in firearm homicides and the decline in firearm homicides was consistent after the introduction of the new act. It is also suggested that approximately 4 585 lives were saved by the new act and this also led to an overall decline in homicides for those five years, not only firearm homicides (Brown *et al.* 2015; Goitom, 2015; King, Proudlock & Michelson, 2006).

Because of the changes in firearm legislation and crime rates it was decided to carry out a follow-up study of Dr Liebenberg's Masters Dissertation (Liebenberg, 2004), one decade later. The follow-up study investigated victimology of FADs from 2009 and their investigative outcomes by 2014. Through this study it was determined that there was a drastic decrease in the number of FADs between 1999 and 2009, which continued until about 2003, after which the number of FADs increased drastically again, reaching a high of 713 cases in 2015. The study aimed to determine whether the decreased number of FADs impacted the investigative and judicial process of the cases.

In 1999 there were 532 FADs, as opposed to 281 in 2009. In 1999 258 cases were homicides and 57 suicides, whereas in 2009 242 were homicidal in nature and 37 suicidal. In 1999 the majority of victims were Black and Coloured males between the ages of 21 and 30 years. In 2009 there was a lesser representation of Coloured males and the victims were mainly Black males, also in the 21 to 30 year age category. In both studies most homicides occurred over the weekends and at night, with 1999 seeing particular peaks in the months of May and again from October through to December and 2009 had peaks in March, May and August. In 1999 more of the victims had alcohol in their system than the victims from 2009. This was especially significant among the suicide victims.

Even though there were 47% fewer FADs in 2009 than 1999, the investigative outcomes five years after death did not improve. The conviction rate is remarkably low for both datasets at 7.2% (38 cases) for 1999 and 5.7% (16 cases) for 2009. In 1999 only 19.7% (104 cases) of cases completed the judicial process by 2004 and of these 44 cases (8.35% of all cases) were withdrawn from court, 38 (7.21% of all cases) ended in a guilty verdict and 22 (4.17% of all cases) in a not-guilty verdict. In 2009 only 58 (20.64%) cases completed the judicial process by 2014, which includes the 16 cases that ended in a guilty verdict, 18 (6.41%) cases where a suspect was found not guilty and also 24 (8.54%) cases that were withdrawn in court. In both studies more than a third of cases are still being investigated after five years. In 1999, 114 (21.63%) of the cases reached an impasse as opposed to 87 cases (30.96%) in 2009.

Below are the categories of impasses with the percentages compared between 1999 and 2009:

- Cases were filed without a clear reason (11.39% for 2009; 0 cases for 1999)
- Cases filed as undetected (11.39% for 2009; 0 cases for 1999)
- The suspect had passed away (1.42% for 2009; 1.52% for 1999)
- The police never identified a suspect (6.41% in 2009; 14.42% for 1999)
- A warrant was out for the arrest of a suspect, but could not be traced (0.36% in 2009; 0.19% for 1999)
- The prosecution decided not to prosecute (0 cases in 2009; 5.50% for 1999)

Even though there was a downward trend in the number of FADs between 1999 and 2009, this did not last and the investigative outcomes also do not look any better, putting into question the efficacy of the Firearms Act. These results are even more disheartening when considering how the number of investigating officers increased between 1999 and 2009. (Caledon Police Station, 2016; Newham & Lancaster, 2012; The South African Police Service 2008; The South African Police Service, 2009; The South African Police Service 2010; The South African Police Service, 2011). This is something that was noticed by government, as a draft of the Firearms Control Amendment Bill is currently before parliament and this would likely indicate that all firearms should undergo ballistic testing and microdots for tracing, allowing traceability even when serial numbers are removed or altered. There will also be a limit to the number of firearms an individual can register for sporting purposes and a minimum sentence of five years will be proposed for any crime where a firearm was used (Davis, 2015).

Future research

There was no investigation into appeals of cases, the cases that had a court verdict could have been appealed after the judgement and this could have changed the outcome. It would be interesting to investigate the cases that did obtain a judgement to determine whether there were any appeals of cases after the outcome was determined in 2015 and also to analyse the dockets to determine whether the outcomes obtained for this study were the result of any appeals.

Another interesting study would be to look into the increase in FADs since approximately 2012. The reasons behind the trends in FADs were not analysed in this study, however it would be a valuable information.

It would also be interesting to look at the overall murder rate in the areas and compare it to the FAD murder rate to see whether the trends seen in FAD murders are also seen in other homicides.

Initially the study also aimed to determine information about the perpetrator, but due to time constraints, this was not done. This would still be an interesting area of study, especially with regards to the relationship between the victim and perpetrator to see whether there are any differences in the investigative outcomes of stranger-perpetrator and acquaintance-perpetrator crimes.

A study similar to this would also be interesting when looking at other types of murders, such as those committed with sharp or blunt objects and not firearms.

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[Last Accessed 2016, February 14].

Appendix A: Proposal for the South African Police Service

APPLICATION TO CONDUCT RESEARCH WITHIN SAPS

Reference number: 25/7/2/1 (201400342)

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Supervisor information:

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Research Experience	Masters mini-dissertation: Fire-arm fatalities examined at Salt River Medico-legal laboratory in 1999 and their investigative outcome by 2004.

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Research Experience	15 published articles. Most recent publications: <ul style="list-style-type: none"> • MOLE, CG, HEYNS, M & CLOETE, T. (2014) "How hard is hard enough? An investigation of the force associated with lateral blunt force trauma to the porcine cranium". Legal Medicine. In Press: Online publication complete: 15-AUG-2014 • HEYNS, M (2013) "The importance of anatomy in the education of forensic scientists". <i>Clinical Anatomy</i>. Vol. 26 (5), p.647. • HEYNS, M & MORRIS, A. (2012) "How to become a forensic scientist". <i>Quest</i>, Vol. 8 (2), p.22. • HEYNS, M. (2009) "Professionalism in the Dissecting Room". <i>Journal of Anatomy</i>, Vol. 214 (5), p. 801. • HEYNS, M. (2009) Report on AMEE 2008, Prague, Czech Republic. <i>Anastomosis</i>, January 2009, p. 11-12. • HEYNS, M. (2008) News from Northern Ireland. <i>Institute of Anatomical Sciences News Magazine</i> No 115, p. 8-9. • HEYNS, M. (2007) "A Strategy towards Professionalism in the Dissecting Room" <i>European Journal of Anatomy</i>, Vol. 11, supplement1. pp 85-89.

Project title:

Firearm Fatalities Examined at Salt River Medico-Legal Laboratory in 2009 and Their Investigative Outcome by 2014

Time period for the study:

Six months to one year (latest December 2015)

Expectations for publication:

The study must be submitted as a dissertation as part of a Master's Degree of Philosophy in Biomedical Forensic Science. The submission includes a publication-ready manuscript. If it is found to be an appropriate study, the manuscript will be sent for publication in a peer-reviewed journal.

Before any of this is done, the South African Police Service (SAPS) will receive the manuscript to confirm that the SAPS is not portrayed in a negative light and that no confidential information is made public.

Introduction:

In 2004 Dr. Liebenberg from the Division of Forensic Medicine at University of Cape Town (UCT) completed her Masters of Medicine in Pathology with a dissertation entitled: "Firearm Fatalities Examined at Salt River Medico-Legal Laboratory in 1999 and Their Investigative Outcome by 2004". The objectives were to construct a victimological profile of victims of firearm deaths (FADs) in Cape Town and also to determine the investigative status of these cases by 2004, the status includes the conviction rate (Liebenberg 2004).

In 1999 there were 532 reported cases of FADs in the Salt River Medico-Legal Laboratory drainage area, 10.7% of these were deemed to be due to suicide (which includes victims of extended suicide). The other 89.3% were homicide cases and 5.3% of these were incidents where the police killed someone in the course of their duties (Liebenberg 2004).

Of the homicidal cases only 38 (7.2%) ended with a guilty verdict and the average time to reach this verdict since the recording of the case was 23.6 months. Twenty two cases (4.2%) ended with a not guilty verdict with an average time lapse of 32.3 months (Liebenberg 2004).

Motivation:

It is now 10 years after the Liebenberg study was conducted, which is a good time period to conduct a follow-up study. There have been changes in the country since then and it would be interesting to see whether there have been any changes in the victimology as well as the investigative outcome.

The study conducted by Liebenberg 2004 yielded remarkably low conviction rates for FADs in the Salt River Medico-Legal Laboratory drainage area. Only 7.2% of all FADs in 1999 had a guilty verdict by 2004. It is now ten years later, which would be a good time to conduct a follow-up study.

Aims and objectives

Aims:

The main aim of this study is to follow up on a Master's Thesis completed in 2004 by Dr Liebenberg.

- The first part of this aim is to conduct victimological investigation of firearm deaths (FADs) in the drainage area of the Salt River Medico-legal Laboratory in 2009
- The second part of this study is to determine the investigative outcome of the 2009 FADs by 2014

Objectives:

- The first objective is to identify specific groups of victims in the sample of FADs with regards to sex, race, age, blood alcohol concentrations and police precinct in which the shooting occurred.
- The second objective is to determine the investigative outcome, which includes the police investigation, prosecution details, court finding, sentencing and also the time lapse from the incident until the outcome is reached

Research methodology:

Through a quick search of the database, it was determined that there are varying annual numbers of firearm deaths recorded in the Salt River mortuary database. In 1999, in the study by Liebenberg (2004) there were 532 individuals who died of firearm incidents. We will use all the FADs from 2009 for this study.

The first part of this study is to collect data for the victimology, which will be done using a victimology datasheet. The data will be gathered from the Salt River Medico Legal Laboratory Database and if the information is not available on the database the autopsy reports will be used.

The second part of the study will be to gather information from the South African Police Service (SAPS) database called the Computer Administration System (CAS). The date of death as well as the police station responsible for the case will be used to get the CAS number, which can then be used to locate the information regarding the case. For this we need to get approval from the SAPS. The SAPS data sheet will be used for this part as well.

The investigative outcomes as observed by Liebenberg 2004 are as follows:

- Docket still with the investigative officer
- The case has reached an impasse
- Case had to be excluded from the study
- The dockets are in the judicial process

- The dockets have completed the judicial process and a decision has been reached (withdrawn, not guilty and guilty)

The time lapse to reach the investigative outcome will also be recorded.

Reference

LIEBENBERG, L., 2004. *Firearm Fatalities Examined at Salt River Medico-Legal Laboratory in 1999 and their Investigative Outcome by 2004*, University of Cape Town.

Victimology data sheet

Sample number:	
-----------------------	--

DR number (mortuary number)	CAS number (police number)	Police station	Investigation officer

Pathologist	Date of autopsy

Date of death (estimated)	Time of death (estimated)	Location of death (e.g. hospital, at home, etc.)

Deceased									
Sex		Race				Age			
M	F	W	BL	BR	OTHER	<18	18-25	25-40	>40

SAPS data sheet

Sample number:	
-----------------------	--

DR number (mortuary number)	CAS number (police number)	Police station	Investigation officer

Accused									
Sex		Race				Age			
M	F	W	BL	BR	OTHER	<18	18-25	25-40	>40

Firearm(s)			
Known: Yes/NO	Calibre	Registered/Not	Homemade

Type of case				
Murder	Suicide	Accident	Self-defence	Occupational (police or security)

Location of incident			
Private home	Public place	Open area	Unknown

Investigative outcome						
Still with IO	Impasse	Excluded	Judicial process	Withdrawn	Not guilty	Guilty

Time in months since incident to outcome	
--	--

Date	Time

Appendix B: Rejection letter from the SAPS



Privaatsak Private Bag	X9004 CAPE TOWN	Faks No. Fax No.	021 417-7416
Your reference/U verwysing: My reference/My verwysing:	25/7/2/1(201400342)	THE PROVINCIAL COMMISSIONER DIE PROVINSIALE KOMMISSARIS	
Enquiries/Navrae:	Col Douse	WESTERN CAPE / WES-KAAP	
		8000	
Tel:	021- 4177105		
Email:	douseZG@saps.gov.za		

Dear Ms Wichers

APPLICATION TO CONDUCT RESEARCH WITHIN SAPS: TO COLLECT DATA FOR THE VICTIMOLOGY FROM THE SALT RIVER MEDICO LEGAL LABORATORY DATABASE RESEARCHER: MS A WICHERS: UNIVERSITY OF CAPE TOWN

1. This office regrets to inform you that your application to conduct a research in the SAPS, has not been successful.
2. Your application does not meet the requirements of SAPS National Instruction 1 of 2006. However, it can be treated as Access to Information.
3. We therefore, kindly advice you to consult your nearest Police Station for the application of Access to Information with regards to your topic.

Respectfully.

Signed

BRIGADIER
PROVINCIAL HEAD: OD AND STRATEGIC MANAGEMENT
WESTERN CAPE
HD HEILBRON

DATE 20/5/2012

Appendix C: Affidavit confirming verbal approval to obtain and use SAPS data

G.P.-S. 01/02

P. 21 (81/143198)

I Ansie Wickers ID number: 9009240049082 state under oath in English:
I am a student at the University of Cape Town enrolled for an M(Ph.D) in Biomedical Forensic Science. As part of the Masters degree I have to conduct a research project. I am doing a project looking at the victimology and investigative outcomes of firearm deaths in the Cape Western Metropole in 2009. As a part of this I needed to obtain information from the South African Police Service (SAPS) on the investigative outcomes of each case included in the study. I put in an application to conduct research with SAPS to do the research using data from the SAPS. This application was sent to Ms Fundie Hako (SAB member) on 8 December 2014. This application was denied on 16 February 2015, via email. The rejection letter stated that I should rather proceed through the access to information route. This meant filling in a SAPS §12(n) form for every case separately, which would have been logistically impossible. Dr Linda Lieberberg, my Masters dissertation supervisor, discussed this with a SAPS liaison officer, Sergeant Jantjies, who is based at Salt River medico legal Laboratory and employed by Woodstock SAPS. He indicated that he is willing to help us obtain the

Signed

p. 1/3 AW

I Ansie Wiches, ID number 9009240049082, State worker with Cathin English

information I need, however we would need to get permission from his station commander, Colonel Ntezo, from Woodstock SAPS.

Dr Linda Liebenberg, Dr Marise Heyns (my co-supervisor), Sergeant Jantjies and myself met with Colonel Ntezo (and a scribe that he brought with) at Salt River Medico Legal Laboratory on the 23rd of April, at which time he said we will have approval by 16:00 on that same day (23 April 2015). With weekly follow-ups Colonel Ntezo promised to get back to us, but never did and said he had problems getting authorisation. On the 29th of May 2015 we (Dr Liebenberg, Dr Heyns, Sergeant Jantjies and myself) met with Colonel Ntezo again, at Salt River Medico Legal Laboratory. At this meeting (29 May 2015) Colonel Ntezo gave Sergeant Jantjies verbal approval to get the information for me and gave me verbal approval to continue with the project, using the information Sergeant Jantjies will give me. I sent my excel sheets that needed to be completed by Sergeant Jantjies to him on 30 May 2015. He completed it with all the information I needed on 26 June 2015. I kept phoning and messaging Colonel Ntezo for the letter authorising us to use the data obtained from Sergeant Jantjies. Every time

Signed

P 21/3 AW

I Ansie Wichers ID number: 91009240049082 State under oath in English:

I communicated with Colonel Ntsezo. He had an excuse, usually saying he is in a meeting and would call me back, but he never did. At this stage the last communication I had with Colonel Ntsezo was on 27 October 2015 at ca. 5.3. I asked for the authorisation letter, he said he was in a meeting and call me back, but he never did. At this stage I lost hope of getting the letter from him and decided to give a sworn statement stating that I have verbal permission to use the SAPS data for my dissertation.

I know and understand the contents of the statement. I have no objection of taking the prescribed oath. I consider the prescribed oath to be binding on my conscience.

Signed

SOUTH AFRICAN POLICE SERVICE
D 3447
DETECTIVE BRANCH
2016-02-01
SPEURDIENS
MILNERTON
SUID-AFRIKAANSE POLISIEDIENS

I hereby declare that the above statement was taken by me and that the document has acknowledged and I have known and understood the contents of this statement. This statement was sworn solemnly before me and deposited at the nearest police station in my presence.	
Milnerton	2016.02.01
Signed	
Schonnes Hendriks	
VOLLE VOORNAAM EN AAN IN DRUKKING	
FULL FIRST NAMES AND SURNAME IN BLOCK LETTERS	
Milnerton	
BUSINESS ADDRESS (STREET ADDRESS)	
Kroeg Rd Milnerton	
SA POLISIEDIENS	
SA POLICE SERVICE	

Appendix D: Approval by the Division of Forensic Medicine and Toxicology to use the mortuary data



Division of Forensic Medicine

Professor Lorna J Martin

P O Box 13914, Mowbray, 7705
Faculty of Health Sciences, Falmouth Building, Entrance 3, Level 1
Tel: +27 (0) 21 406 6412/6110 Fax: +27 (0) 21 448 1249
E-mail: lornaj.martin@uct.ac.za
Internet: www.forensicmedicine.uct.ac.za

4 December 2014

I, Lorna Jean Martin, hereby grant permission for Miss Ansie Wichers to have access to our Office Autopsy Database and related records, for her research project.

The research must be anonymised by removing all identifiable patient information.

A handwritten signature in black ink, appearing to read "Lorna J Martin", is written over a grey rectangular box that contains the word "Signed" in a stylized font.

Lorna J Martin
Professor, & Head of Clinical Department

Appendix E: Approval by the HREC

Data collection was completed before the approval period was over, 31 December 2015



UNIVERSITY OF CAPE TOWN
Faculty of Health Sciences
Human Research Ethics Committee



Room E52-24 Old Main Building
Groote Schuur Hospital
Observatory 7925
Telephone [021] 406 6338 • Facsimile [021] 406 6411
Email: shuretta.thomas@uct.ac.za
Website: www.health.uct.ac.za/fhs/research/humanethics/forms

24 December 2014

HREC REF: 945/2014

Dr L Liebenberg
Forensic Pathology
Falmouth Building

Dear Dr Liebenberg

PROJECT TITLE: FIREARM FATALITIES EXAMINED AT SALT RIVER MEDICO-LEGAL LABORATORY IN 2009 AND THEIR INVESTIGATIVE OUTCOME BY 2014 (Master-candidate-A Wichers)

Thank you for submitting your study to the Faculty of Health Sciences Human Research Ethics Committee for review.

It is a pleasure to inform you that the HREC has **formally approved** the above-mentioned study.

Approval is granted for one year until the 30th December 2015.

Please submit a progress form, using the standardised Annual Report Form if the study continues beyond the approval period. Please submit a Standard Closure form if the study is completed within the approval period.

(Forms can be found on our website: www.health.uct.ac.za/fhs/research/humanethics/forms)

Please quote the HREC REF in all your correspondence.

We acknowledge that the student, Ansie Wichers will also be involved in this study.

Please note that the ongoing ethical conduct of the study remains the responsibility of the principal investigator.

Yours sincerely

Signed

PP

PROFESSOR M BLOCKMAN
CHAIRPERSON, FHS HUMAN RESEARCH ETHICS COMMITTEE

Federal Wide Assurance Number: FWA00001637.

Institutional Review Board (IRB) number: IRB00001938

This serves to confirm that the University of Cape Town Human Research Ethics Committee complies to the Ethics Standards for Clinical Research with a new drug in patients, based on the Medical Research Council (MRC-SA), Food and Drug Administration (FDA-USA), International Convention on Harmonisation Good Clinical Practice (ICH GCP) and Declaration of Helsinki guidelines.

HREC 945/2014

The Human Research Ethics Committee granting this approval is in compliance with the ICH Harmonised Tripartite Guidelines E6: Note for Guidance on Good Clinical Practice (CPMP/ICH/135/95) and FDA Code Federal Regulation Part 50, 56 and 312.

HREC 945/2014

Appendix F: SACQ instructions to authors, style guide and racial classification policy

ISSN 19913877 *printed version*

ISSN 24133108 *online version*

INSTRUCTIONS TO AUTHORS

[Scope and editorial policy](#)

[Manuscript format and layout](#)

[Submissions](#)

Scope and editorial policy

The SA Crime Quarterly, published by the Institute for Security Studies, provides **concise analysis of developments in crime trends, and the state's response**. The SA Crime Quarterly has replaced the Nedbank Crime Index. South African Crime Quarterly is an inter-disciplinary peer-reviewed journal that promotes professional discourse and the publication of research on the subjects of crime, criminal justice, crime prevention, and related matters including state and non-state responses to crime and violence. South Africa is the primary focus for the journal but articles on the above mentioned subjects that reflect research and analysis from other African countries are considered for publication, if they are of relevance to South Africa. SACQ is an applied policy journal. Its audience includes policy makers, criminal justice practitioners and civil society researchers and analysts, including the academy. The purpose of the journal is to inform and influence policy making on violence prevention, crime reduction and criminal justice. Articles submitted to SACQ are double-blind peer-reviewed before publication. From time to time SACQ publishes themed editions. The editor would welcome suggestions. Calls for submissions for themed editions will be published on the ISS website.

Manuscript format and layout

Prospective authors are asked to take note of the following information:

- Articles should be between 3000 and 5000 words
- Language and tone:
 - The article should be written in an accessible way that non-experts are able to read and understand the piece. Please avoid using jargon

as far as possible and when jargon is used (especially legal) it must be explained.

- Keep sentences short and paragraphs short.
- The journal is laid-out in two columns. Please keep subheadings short so that they fit on one line of a column if possible.
- As far as the content is concerned:
 - A 100–150 word abstract must be included. This should be a clear summary that draws readers in to the article
 - The topic being covered should be linked to current events, or to policy debates, legislation etc.
 - We do want to hear your opinion of the issue – so positions can be taken. But, there should always be a clear presentation of the facts, background to the issue, etc as well.
- Format:
 - Use sub-headings wherever possible (to guide busy readers, and break up text) Tables, boxes, bullet points, graphs most welcome
 - Please suggest a title for the article. It should be a punchy title with a descriptive subtitle.
 - Endnotes are used for all referencing (no sources in the text in brackets please).
 - A bibliography should precede endnotes (please see the SACQ style guide on the SACQ website for a description of the appropriate referencing style).
 - Acknowledgements can be made at the end of the article if necessary.

GUIDELINES FOR CASE NOTES

1. Check the SACQ style guide

The journal uses endnotes rather than footnotes. It will save time if from the beginning you shape your case note in the correct style.

2. The Introduction

This identifies the area of law involved, the significance of the case and its central legal issue. The idea is to hook in the readers, alerting them to a change to or a clarification to or a wrong interpretation of the law.

The Introduction provides a reason why they must continue reading. You may like to be provocative by saying what you intend to argue – e.g. that the case was wrongly decided / it constitutes good precedent / provides needed clarity etc. But be concise.

3. A summary of the law before the case

Provide a summary of the existing law so that the reader can understand the significance of the case. This section may involve reference to the common law or part of a statute and the leading cases. It could be that the case you intend discussing is the first to interpret a statute – in which case your introduction may explain what you understand the purpose/mischief behind the statute. *NOTE: This section might more logically follow the next section.*

4. The facts of the case

This is a summary, clearly reported, avoiding words like Respondent, Applicant or Appellant which could cause the Reader to lose track of who is who. Rather opt for descriptors like buyer, seller, employer, lessor etc. Unnecessary facts and dates should be pruned. Significant conflicting evidence should be briefly noted. In this section you are reporting, not judging or evaluating and this is not a long section. Ask yourself whether a detail has any bearing on the case at all. If not, cut. (Although sometimes a graphic detail makes the case memorable, like a dead snail in a ginger-beer bottle, as in *Donoghue v Stevenson*) Try and tell the story in an engaging way.

5. Presenting the court's decision

The theoretical key to the common law system of precedent is the distinction between the *ratio decidendi* and *obiter dicta* in a case. Your task is to isolate that portion of the judgment which contains the ratio. But as someone said "An *obiter dictum* in one case may become *ratio decidendi* in the next." Similarly, a minority judgment may find approval in a subsequent case. So alongside the ratio you may want to refer to a hypothetical consideration raised in obiter or to the minority judgment.

6. The significance of the case

This section amplifies the promise made in the Introduction. Here your critical voice must come through and you move from the descriptive factual account to an analytical and evaluative stage. **Key questions** to answer are:

- o Was the **court's decision appropriate?** The guidelines for case notes were drafted by Prof Alan Rycroft who holds the chair in Commercial Law and is Deputy Dean of the faculty of law at the University of Cape Town.

- Does this decision change / conform with existing law? Was the reasoning consistent with previous reasoning in similar cases? Is it likely that the decision will significantly influence existing law?
- Did the court adequately justify its reasoning? Was its interpretation of the law appropriate? Was the reasoning logical / consistent? Did the court consider all / omit some issues and arguments? And, if there was omission, Does this weaken the merit of the decision?
- What are the policy implications of the decision? Are there alternative approaches which could lead to more appropriate public policy in this area? This section should also offer an analysis or description of existing literature about the case you are discussing.
- If your finding is that the decision creates legal precedent, or conversely, upholds legal precedent, what does that mean? What are the implications for the legal and public policy contexts in which this decision sits?

7. Do not assume that judges get it right

It is helpful to remember that they have chosen one approach and that the other party fought the case believing in another approach. You should feel free, if you can justify it with sound reasons, to be politely critical of the judge. Do not be intimidated by the thought that you are exposing yourself in print – the worst that can happen is that someone else will join the debate. You may be aware of the guidance given to first-year law students as to how to use a case note – they are told to use the **FIRAC model** (Facts, Issue, Rule of Law, Application, and Conclusion). This is not a bad model to keep in mind for an academic case note.

8. Choose a title which is descriptive of the content

While it is amusing to read humorous titles, if you want to attract a wide readership the title will be the single most significant way for readers to find it. As NRF rating **measures 'impact' you might like to increase your chances** of being cited elsewhere with a title which is accurate as to its content.

Submissions

If you would like to contribute a letter or an article to SACQ contact the editor, Chandré Gould at cgould@issafrica.org

Institute for Security Studies Style Guide – SA Crime Quarterly

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SECTION 1

REFERENCES IN THE TEXT

The **short-title system of referencing** is to be used in the SA Crime Quarterly. Use (end) notes, not footnotes. The heading should read 'Notes', not 'Endnotes'.

(END)NOTE INDICATOR: POSITION IN TEXT

Place the endnote indicator after the argument, not after the name(s) of the author(s):

Ghobarah, Huth and Russett point out that there has been a dramatic, but largely unknown, decline in the number of wars, genocides and human rights abuse over the past decade.¹

(END)NOTE: DESCRIPTION IN NOTE

1 Hazem Ghobarah, Paul Huth and Bruce Russett,¹ The postwar public health effects of civil conflict,² *Social Science and Medicine*³ 59 (2004), 869–884,⁴ 875.⁵ These results refine those in Ghobarah, Huth and Russett,⁶ *Civil wars kill and maim people - long after the shooting stops, American Political Science Review* 97(2)⁷ (2003), 189–202.

1 REFERENCES IN THE TEXT – (END) NOTES

In all examples in this section, the note containing the first reference **(IN BOLD RED)** is followed by a subsequent reference using the short-title method **(IN BOLD GREEN)**. It is assumed that the references all

pertain to direct quotes, where page numbers are required. When you are referring to a central idea in a specific work, no page numbers are required.

1.1 Books

Name(s) (or initials) and surname(s) of author(s)

Full title of book (including subtitle) in italics

Edition of book (if not first edition), not printing or impression

Place of publication

Publisher

Year of publication

Page number in case of direct quote

¹ Names of authors are given as they appear on the cover and title page.

² Only the first word in the title of article is capitalised; no quotation marks are required.

³ No comma is required following the journal title; the journal title should be written in uc/lc.

⁴ Inclusive page numbers only, need not be preceded by p or pp.

⁵ Number of page where direct quote was taken from.

⁶ Same authors, therefore no names are required.

⁷ This part of reference in the format: issue (number).

Daniel Bell, *The cultural contradictions of capitalism*, New York: Basic Books, 1976, 7.

Bell, *The cultural contradictions of capitalism*, 9.

If followed by a reference to the same page:

Ibid.

W Ulrich, *Critical heuristics of social planning: an overview*, 2nd ed, Chicago: University of Chicago Press, 2003, 117.

Ulrich, *Critical heuristics of social planning*, 179.

1.2 Books with multiple authors

Books with two or three authors, of equal status

J Kirk and R J Munday, *Narrative analysis*, 3rd ed, Bloomington: Indiana University Press, 2004, 66.

Kirk and Munday, *Narrative analysis*, 80.

Books with more than three authors

B Grace, T Sheradon, P Honey et al, *A short history of the world*, Princeton, NJ: Princeton University Press, 1998, 15.

Grace et al, *A short history of the world*, 89.

1.3 Books published under an editorship

Paul E Lovejoy and Toyin Falola (eds), *Pawnship, slavery, and colonialism in Africa*, Trenton and Asmara: Africa World Press, 2003, 111.

Lovejoy and Falola, *Pawnship, slavery, and colonialism in Africa*, 119.

1.4 Chapters of edited books

Jean Allman, Rounding up spinsters: gender chaos and unmarried women in colonial Asante, in Dorothy L Hodgson and Shirley A McCurdy (eds), *'Wicked' women and the reconfiguration of gender in Africa*, Portsmouth, Oxford, Cape Town: Social History of Africa, 2001, 89.
Allman, Rounding up spinsters, 190.

1.5 Journal articles

Name(s) (or initials) and surname(s) of author(s)
Title of article
Name of journal, in italics
Volume number followed by issue number (where relevant) in brackets
Year of publication in brackets
Comma, followed by page numbers only (no p or pp required)
Page number in case of direct quote

James Murdoch and Todd Sandler, Economic growth, civil wars, and spatial spillovers, *Journal of Conflict Resolution* 46(1) (2002), 91–110, 96.
Murdoch and Sandler, Economic growth, civil wars, and spatial spillovers, 101.

1.6 Newspaper articles

Name(s) (or initials) and surname(s) of author(s) (if known)
Title of article
Name of newspaper, in italics
Day, month and year of publication, followed by comma
Page number(s) where article appeared
Maggi Barnard, AIDS 'an intelligence issue', *The Namibian*, 13 February 2001, 7-8.
Barnard, AIDS 'an intelligence issue', 8.

1.7 Personal communications

Use an endnote reference, as in these examples:
'He called the current economic climate uncertain.'¹
1 R Jordan, Commissioner of police, Pietermaritzburg, personal communication, 6 July 2004.

OR

'At our meeting R Jordan¹ pointed out ...'
1 Personal communication, 4 April 2004.

1.8 Referencing from the Internet

1.8.1 Documents

Name(s) (or initials) and surname(s) of author(s), or corporate author
Title of document (with a version number if later than the first)
Title of web page, normally the main heading on the page
Location URL
Date accessed in brackets (especially important in this context, since the page may have been updated)

United Nations Security Council, Resolution 1862 (2009), adopted by the Security Council at its 6065th

meeting on 14 January 2009,
<http://daccessdds.un.org/doc/UNDOC/GEN/N09/208/38/PDF/N0920838.pdf?OpenElement> (accessed 12 February 2009).
United Nations Security Council, Resolution 1862.

1.8.2 Online newspaper articles

Maggi Barnard, AIDS 'an intelligence issue', *The Namibian*, 13 February 2001,
<http://www.namibian.com.na/2001/February/news/01D3168B4F.html> (accessed 30 May 2005).
Maggi Barnard, AIDS 'an intelligence issue'.

M Chittenden, L Rogers and D Smith, Focus: Targetitis ails NHS, *Times Online*, 1 June 2003,
<http://www.timesonline.co.uk/print/11-1506-669.html> (accessed 17 March 2005).
Chittenden et al, Focus: Targetitis ails NHS.

1.8.3 Information obtained from a website

Political corruption, Wikipedia, [http://en.wikipedia.org/wiki/Corruption_\(political\)](http://en.wikipedia.org/wiki/Corruption_(political)) (accessed 12 February 2009).
Political corruption.

1.8.4 E-mail correspondence/discussion lists

Particular care needs to be taken if you are quoting from these sources, as they may include personal e-mail addresses and be from a restricted source. Permission should be sought before these sources are quoted:

J Jones (jones@jones.com), Mobile phone developments, Message to R G Schmit (rgschmit@syy.ac.uk), Sent Monday, 7 June 2005, 08:13, http://gog.defer.com/2004_07_01_defer_archive.html (accessed 7 July 2004).
Jones, Mobile phone developments.

1.9 Other types of document in (end) notes

1.9.1 Acts of Parliament

The standard method of citing an Act of Parliament is by its short title, which includes the year, followed by the number of the Act in brackets.

Higher Education Act 2004 (Act 70 of 2004), London: HMSO.
Higher Education Act 2004.

1.9.2 Law reports

Name of the parties involved in the law case
Law reporting series
Volume and number
Page reference
Year of reporting

R v White (John Henry), EWCA Crim 689, 2005 WL 104528. *Jones v Lipman* [1962] 1 WLR 832, 2005.
R v White (John Henry).

1.9.3 Dissertations and theses

Name (or initials) and surname of author
Title of dissertation/thesis (usually in roman type: not published)
Academic level (for example 'master's dissertation' or 'PhD thesis')
Institution
Where situated
Relevant year

Julie Richmond, Customer expectations in the world of electronic banking: a case study, Unpublished PhD thesis, University of North West, Potchefstroom, 2005, 344.

Richmond, Customer expectations in the world of electronic banking, 367.

SECTION 2

STYLE AND FORMATTING

2.1 General principles

Style and formatting should be applied consistently. One way of presenting information may be as good as another is, but consistency promotes clarity and cohesion.

Use UK English, not US English.

2.2 Article titles, headings, and sections

2.2.1 Article titles

- Titles are generally nouns or noun phrases (**Effects of the wild**, not **About the effects of the wild**).
- Titles for SACQ should include a primary title and a secondary title e.g: Agents of restorative justice? Probation officers in the child justice system
- Titles should be short.
- The initial letter of a title is capitalised (except in very rare cases, such as **eBay**). Otherwise, capital letters are used only where implied by normal capitalisation rules (**Funding of UNESCO projects**, not **Funding of UNESCO Projects**)
- **A**, **an**, and **the** are normally avoided as the first word (**Economy of the Second Empire**, not **The economy of the Second Empire**), unless part of a proper noun (**The Hague**).
- Special characters such as the slash (/), plus sign (+), braces ({}), and square brackets ([]) are avoided; the ampersand (&) is replaced by **and**, unless it is part of a formal name (**Emerson, Lake & Palmer**).

2.2.2 Header levels

Indicate the hierarchy of levels, preferably not more than three, as follows:

HEADING 1

Heading 2

Heading 3

2.2.3 Section headings

- Section names should not explicitly refer to the subject of the article, or to higher-level headings, unless doing so is shorter or clearer. For example, **Early life** is preferable to **His early life** when **His** means the subject of the article; headings can be assumed to be about the subject unless otherwise indicated. Section headings should be kept short – fewer than 8 words Capitalise the first letter of the first word and any proper nouns in headings, but leave the rest lower case. Thus **Rules and regulations**, not **Rules and Regulations**.

2.3 Acronyms and abbreviations

Write out both the full version and the abbreviation at first occurrence. When introducing a new name in an article, it is good practice to use the full name on its first occurrence, followed by the abbreviated form in parentheses. Initial capitals are not used in the full name of an item just because capitals are used in the abbreviation. *Incorrect (not a name)*:

We used Digital Scanning (DS) technology

Correct: **We used digital scanning (DS) technology**

Correct (name): **Produced by the British Broadcasting Corporation (BBC)**

If the full term is already in parentheses, use a comma (,) and **or** to indicate the abbreviation; for example **They first debated the issue in 1999 (at a congress of the African National Congress, or ANC).**

2.4 Quotations

2.4.1 Minimal change

Wherever reasonable, preserve the original style, spelling, and punctuation. Where there is a good reason not to do so, insert an editorial explanation of the changes, usually within square brackets (**[for example]**). If there is an error in the original statement, use **[sic]** to show that it is not a transcription error.

2.4.2 Allowable changes

Though the requirement for minimal change is strict, a few merely typographical elements of the quoted text should normally be altered without comment, to conform to English conventions. Such a practice is universal, in all publishing. Such alterations include:

- Styling of dashes (use spaced en dash).
- Such typographical elements as guillemets (« »), in quoted French, Portuguese, and other foreign-language material) should be altered to their English-language equivalents (guillemets become quote marks, for example).
- Spaces before periods, colons, semicolons, and the like should be removed, since they are merely typographical and are alien to the conventions in use throughout English-language publishing in general.
- Some text styling (of course the typeface will be automatically made the same as the article's default typeface; but preserve bold, underlining, and italics).
- Ellipses should be used whenever parts of a quotation are skipped. Legitimate reasons for omitting parts of quotation include removing extraneous, irrelevant, or parenthetical words or skipping over

unintelligible or guttural speech (umm, ahhs, and hmms, for example). Care should be made not to use ellipses to remove context or to selectively quote so as to change the meaning of the quote.

2.4.3 Quotations within quotations

When a quotation includes another quotation (and so on), start with single quotation marks outermost, and, working inward, alternate double with single quotation marks. The following example has three levels of quotation: „She disputed his statement that “Voltaire never said „I disapprove of what you say, but I will defend to the death your right to say it.””” Adjacent quotation marks, as at the end of this example, can be difficult to read unless kerned apart slightly.

2.4.4 Attribution

The author of a quote of a full sentence or more should be named.

2.4.5 Block quotations

A long quote (more than four lines, or consisting of more than one paragraph, regardless of number of lines) is formatted as a block quotation. Block quotes are not enclosed in quotation marks.

2.5 Gender-neutral language

Use gender-neutral language where this can be done with clarity and precision. This does not apply to direct quotations or the titles of works (*The Ascent of Man*), or where all referents are of one gender, such as in an all-female school (*if any student broke that rule, she was severely punished*).

2.6 Bulleted and numbered lists

- Do not use lists if a passage reads easily using plain paragraphs.
- Do not leave blank lines between items in a bulleted or numbered list unless there is a reason to do so.
- Use numbers rather than bullets only if:
 - there is a need to refer to the elements by number
 - the sequence of the items is critical; or
 - the numbering has value of its own, for example in a track listing.
- Use the same grammatical form for all elements in a list where possible, and do not mix the use of sentences and sentence fragments as elements.
 - When the elements are sentence fragments, they are typically introduced by a lead fragment ending with a colon. Final punctuation for these elements can be omitted entirely, or should otherwise be a period for the terminating element with each of its preceding elements having a final semicolon.

2.7 Graphs/tables/maps

All graphs/tables/maps should have headings and sources and be made available at a suitable resolution (300 dpi).

POLICY ON THE USE OF RACIAL CLASSIFICATIONS IN ARTICLES PUBLISHED IN SOUTH AFRICAN CRIME QUARTERLY

Racial classifications have continued to be widely used in South Africa post-apartheid. Justifications for the use of racial descriptors usually relate to the need to ensure, and monitor societal transformation. However, in the research and policy community racial descriptors are often used because they are believed to enable readers and peers to understand the phenomenon they are considering. We seem unable to make sense of our society, and discussions about our society, without reference to race.

South African Crime Quarterly seeks to challenge the use of race to make meaning, because this reinforces a racialised understanding of our society. We also seek to resist the lazy use of racial categories and descriptors that lock us into categories of identity that we have rejected and yet continue to use without critical engagement post-apartheid. Through adopting this policy South African Crime Quarterly seeks to signal its commitment to challenging the racialization of our society, and racism in all its forms.

We are aware that in some instances using racial categories is necessary, appropriate and relevant; for example, in an article that assesses and addresses racial transformation policies, such as affirmative action. In this case, the subject of the article is directly related to race.

However, when race or racial inequality or injustice, is not the subject of the article, SACQ will not allow the use of racial categories. We are aware that some readers might find this confusing at first and may request information about the race of research subjects or participants. However, we deliberately seek to foster such a response in order to disrupt racialised thinking and meaning-making.